

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

## Genotyping Report

FMDV serotype: O  
Country: Thailand  
Year: 2016, 2017  
Batch: WRLFMD/2017/00011  
No. of sequences: 18  
Report date: 29th June 2017  
Report generated by: Nick Knowles  
Report checked by: Kasia Bankowska



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

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Virus sample name:	TAI/38/2016
Sender reference:	142/16R3B1
Location of origin:	Tha Pla Duk, Mae Tha, Lamphun
Country of origin:	Thailand
Date of collection:	03/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33927, genome 33928, sequence viba_33929, sequencing info 33930	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30522	TAI/35/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.8	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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	88.2	0	O	SEA		
viba_491	TUR/257/2008		84.2	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_860	IRN/6/2015	cattle	83.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_719	IRN/88/2009		83.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.6	0	O	ME-SA	PanAsia-2	
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

Virus sample name:	TAI/39/2016
Sender reference:	146-2/16R3B2
Location of origin:	Thung Saliam, Thung Saliam, Sukhothai
Country of origin:	Thailand
Date of collection:	03/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33931, genome 33932, sequence viba_33933, sequencing info 33934	

#### 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_30514	TAI/33/2016	porcine	100.0	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.7	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
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/40/2016
Sender reference:	153/16R3B2
Location of origin:	Saluang, Mae Rim, Chiang Mai
Country of origin:	Thailand
Date of collection:	09/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33935, genome 33936, sequence viba_33937, sequencing info 33938	

#### 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_30514	TAI/33/2016	porcine	100.0	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.7	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
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/41/2016
Sender reference:	155-2/16R3B2
Location of origin:	Lao Yao, Ban Hong, Lamphun
Country of origin:	Thailand
Date of collection:	09/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33939, genome 33940, sequence viba_33941, sequencing info 33942	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30510	TAI/32/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33949	TAI/43/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33953	TAI/44/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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/42/2016
Sender reference:	157-1/16R3B2
Location of origin:	San Sai Ngam, Thoeng, Chiang Rai
Country of origin:	Thailand
Date of collection:	09/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33943, genome 33944, sequence viba_33945, sequencing info 33946	

#### 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_30506	TAI/31/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.7	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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/43/2016
Sender reference:	159/16R3B2
Location of origin:	Tha Wang Phrao, San Pa Thong, Chiang Mai
Country of origin:	Thailand
Date of collection:	09/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33947, genome 33948, sequence viba_33949, sequencing info 33950	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30510	TAI/32/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33941	TAI/41/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33953	TAI/44/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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/44/2016
Sender reference:	161/16R3B2
Location of origin:	Makhuea Chae, Mueang Lamphun, Lamphun
Country of origin:	Thailand
Date of collection:	09/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33951, genome 33952, sequence viba_33953, sequencing info 33954	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30510	TAI/32/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33949	TAI/43/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33941	TAI/41/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

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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/45/2016
Sender reference:	170-2/16R3B1
Location of origin:	Pa Ko Dam, Mae Lao, Chiang Rai
Country of origin:	Thailand
Date of collection:	15/08/2016
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:	08/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33955, genome 33956, sequence viba_33957, sequencing info 33958	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33981	TAI/51/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.4	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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	88.2	0	O	SEA		
viba_491	TUR/257/2008		84.2	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		84.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_860	IRN/6/2015	cattle	83.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_650	IRN/8/2005	ovine	83.6	0	O	ME-SA	PanAsia-2	
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

Virus sample name:	TAI/46/2016
Sender reference:	186/16R3B1
Location of origin:	Khi Lek, Mae Taeng, Chiang Mai
Country of origin:	Thailand
Date of collection:	22/08/2016
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:	09/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33959, genome 33960, sequence viba_33961, sequencing info 33962	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30522	TAI/35/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.7	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.4	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_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_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_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

Virus sample name:	TAI/47/2016
Sender reference:	189-2/17R3B2
Location of origin:	Sa-At, Nam Phong, Khon Kaen
Country of origin:	Thailand
Date of collection:	26/08/2016
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:	09/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33963, genome 33964, sequence viba_33965, sequencing info 33966	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30522	TAI/35/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.8	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_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_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_719	IRN/88/2009		84.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.9	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	83.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_354	PAK/16/2010	cattle	83.8	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	TAI/48/2016
Sender reference:	195/16R3B2
Location of origin:	Phraek Ha, Khuan Khanun, Phatthalung
Country of origin:	Thailand
Date of collection:	29/08/2016
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:	09/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33967, genome 33968, sequence viba_33969, sequencing info 33970	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30526	TAI/37/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33973	TAI/49/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.7	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.5	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_860	IRN/6/2015	cattle	84.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_666	IRN/18/2010	cattle	84.0	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
viba_354	PAK/16/2010	cattle	83.4	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	TAI/49/2016
Sender reference:	197/16R3B1
Location of origin:	Pha Phayom, Pa Phayom, Phatthalung
Country of origin:	Thailand
Date of collection:	01/09/2016
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:	09/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017

VIBASys IDs: sample 33971, genome 33972, sequence viba\_33973, sequencing info 33974

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33969	TAI/48/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30526	TAI/37/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.4	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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	87.8	0	O	SEA		
viba_491	TUR/257/2008		84.5	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		84.1	0	O	ME-SA	PanAsia-2	SAN-09
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_860	IRN/6/2015	cattle	83.8	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_719	IRN/88/2009		83.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.6	0	O	ME-SA	PanAsia-2	
viba_354	PAK/16/2010	cattle	83.3	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	TAI/50/2016
Sender reference:	196-1/16R3B2
Location of origin:	Nong Chik, Khiri Mat, Sukhothai
Country of origin:	Thailand
Date of collection:	02/09/2016
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:	09/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33975, genome 33976, sequence viba_33977, sequencing info 33978	

#### 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_30514	TAI/33/2016	porcine	100.0	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.7	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
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/51/2016
Sender reference:	198-2/16R3R2
Location of origin:	Wo Kaeo, Hang Chat, Lamphang
Country of origin:	Thailand
Date of collection:	02/09/2016
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:	09/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33979, genome 33980, sequence viba_33981, sequencing info 33982	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30502	TAI/30/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.8	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.8	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.7	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_491	TUR/257/2008		84.2	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		84.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_860	IRN/6/2015	cattle	83.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_650	IRN/8/2005	ovine	83.6	0	O	ME-SA	PanAsia-2	
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

Virus sample name:	TAI/55/2016
Sender reference:	354-1/16B3
Location of origin:	Nam Khiao, Rattana Buri, Surin
Country of origin:	Thailand
Date of collection:	28/11/2016
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:	13/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33983, genome 33984, sequence viba_33985, sequencing info 33986	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33981	TAI/51/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.4	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.2	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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		84.5	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_505	TUR/264/2009		84.1	0	O	ME-SA	PanAsia-2	SAN-09
viba_719	IRN/88/2009		84.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.9	0	O	ME-SA	PanAsia-2	
viba_860	IRN/6/2015	cattle	83.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_666	IRN/18/2010	cattle	83.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_354	PAK/16/2010	cattle	83.6	0	O	ME-SA	PanAsia-2	PUN-10



Virus sample name:	TAI/56/2016
Sender reference:	357/16B3
Location of origin:	Bueng O, Kham Thale So, Nakhon Ratchasima
Country of origin:	Thailand
Date of collection:	29/11/2016
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:	13/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33987, genome 33988, sequence viba_33989, sequencing info 33990	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_31488	VIT/17/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_31484	VIT/15/2016	water buffalo	99.4	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.2	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.1	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.1	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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	88.6	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_719	IRN/88/2009		84.1	0	O	ME-SA	PanAsia-2	ANT-10
viba_354	PAK/16/2010	cattle	84.1	0	O	ME-SA	PanAsia-2	PUN-10
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_860	IRN/6/2015	cattle	83.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_285	UKG/35/2001	porcine	83.3	0	O	ME-SA	PanAsia	

Virus sample name:	TAI/59/2016
Sender reference:	367-3/16B3
Location of origin:	Phon Tong, Mueang Chaiyaphum, Chaiyaphum
Country of origin:	Thailand
Date of collection:	30/11/2016
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:	13/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33991, genome 33992, sequence viba_33993, sequencing info 33994	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_33933	TAI/39/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33937	TAI/40/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33977	TAI/50/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_33929	TAI/38/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.2	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	99.2	0	O	SEA	Mya-98	

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.0	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.2	0	O	SEA		
viba_491	TUR/257/2008		84.2	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_860	IRN/6/2015	cattle	83.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_719	IRN/88/2009		83.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	83.6	0	O	ME-SA	PanAsia-2	
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

Virus sample name:	TAI/1/2017
Sender reference:	5-1/17B3
Location of origin:	Nong O, Ban Pong, Ratchaburi
Country of origin:	Thailand
Date of collection:	10/01/2017
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:	14/06/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33995, genome 33996, sequence viba_33997, sequencing info 33998	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30518	TAI/34/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	98.6	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	98.4	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.1	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	98.1	0	O	SEA	Mya-98	
viba_32425	MYA/4/2017a	cattle	97.9	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	97.9	0	O	SEA	Mya-98	
viba_30494	TAI/21/2016	cattle	97.9	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	97.8	0	O	SEA	Mya-98	
viba_33945	TAI/42/2016	cattle	97.8	0	O	SEA	Mya-98	

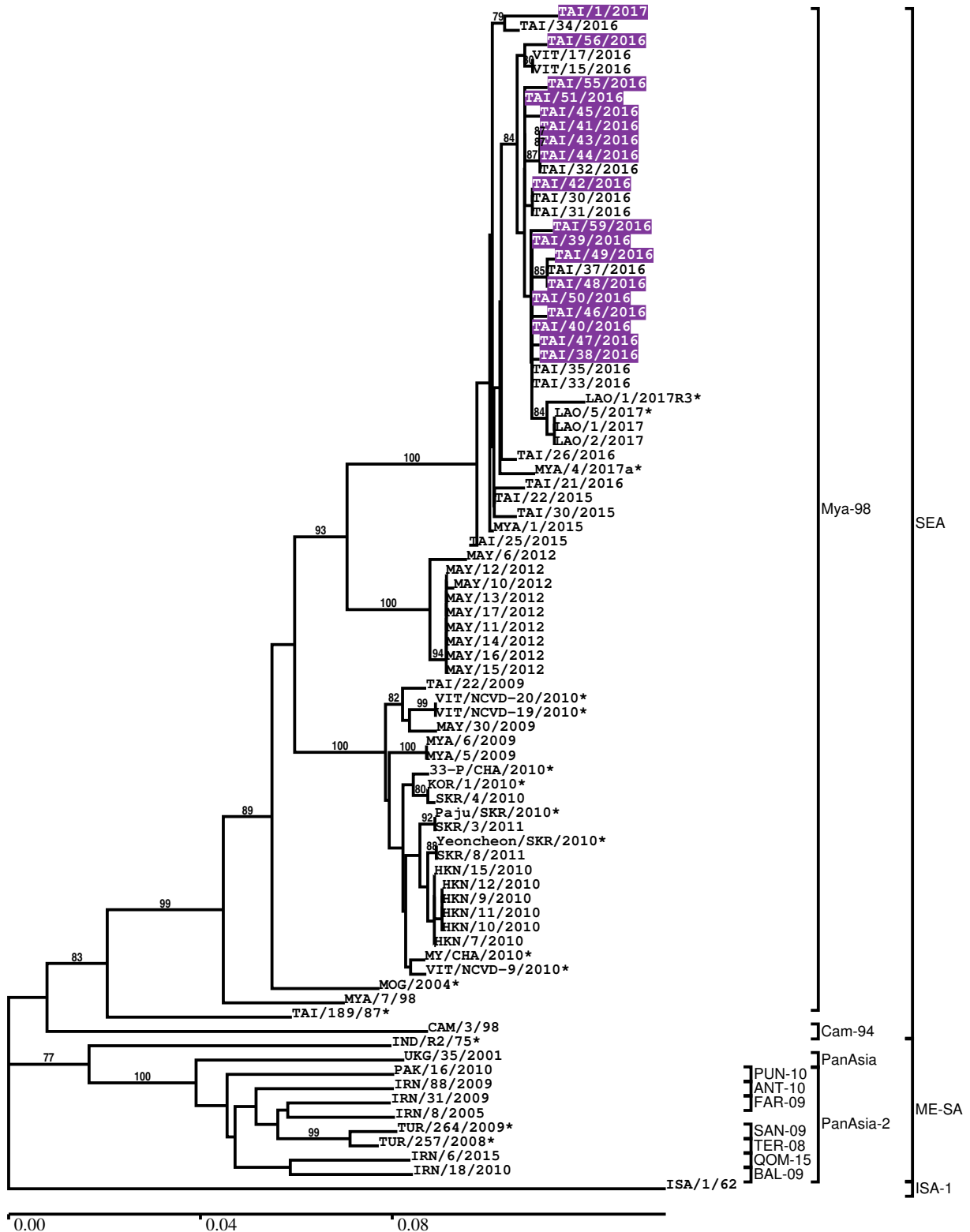
#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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	87.6	0	O	SEA		
viba_860	IRN/6/2015	cattle	84.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_694	CAM/3/98	bovine	84.0	0	O	SEA	Cam-94	
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_766	IRN/31/2009	cattle	83.8	0	O	ME-SA	PanAsia-2	FAR-09
viba_491	TUR/257/2008		83.8	0	O	ME-SA	PanAsia-2	TER-08
viba_719	IRN/88/2009		83.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	83.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_576	IND/R2/75		83.3	0	O	ME-SA		

Report on FMDV O in Thailand in 2016, 2017

Batch: WRLFMD/2017/00011



\*, not a WRLFMD Reference Number

## Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2017/00011-Thailand-O (18 sequences)
Sequence database set:	allseqs_O (3543 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:	13
VIBASys version:	master-1.1.0-17-gf69a4d1

## 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/1/2017	n/a	porcine	WRLFMD	Thailand	SEA/Mya-98
TAI/34/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/56/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
VIT/17/2016	n/a	cattle	WRLFMD	Vietnam	SEA/Mya-98
VIT/15/2016	n/a	water buffalo	WRLFMD	Vietnam	SEA/Mya-98
TAI/55/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/51/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/45/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/41/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/43/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/44/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/32/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/42/2016	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/59/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/39/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/49/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/37/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/48/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/50/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/46/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/40/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/47/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/38/2016	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
LAO/1/2017R3*	n/a	n/a	TRRL	Laos	SEA/Mya-98
LAO/5/2017*	n/a	n/a	TRRL	Laos	SEA/Mya-98
LAO/1/2017	n/a	cattle	WRLFMD	Laos	SEA/Mya-98
LAO/2/2017	n/a	cattle	WRLFMD	Laos	SEA/Mya-98
TAI/26/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
MYA/4/2017a*	n/a	cattle	TRRL	Myanmar	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

*continued on next page*

label	accession	host(s)	lab	country	taxonomic information
MYA/1/2015	n/a	bovine	WRLFMD	Myanmar	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/12/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/10/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/13/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/17/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/11/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/14/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/16/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/15/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
TAI/22/2009	HQ116269	porcine	WRLFMD	Thailand	SEA/Mya-98
VIT/NCVD-20/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
VIT/NCVD-19/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
MAY/30/2009	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MYA/6/2009	HQ116229	cattle	WRLFMD	Myanmar	SEA/Mya-98
MYA/5/2009	HQ116228	cattle	WRLFMD	Myanmar	SEA/Mya-98
33-P/CHA/2010*	JQ973889	bovine	LVRI	China	SEA/Mya-98
KOR/1/2010*	HM143846	cattle	NVRQS	South Korea, Republic of	SEA/Mya-98
SKR/4/2010	JQ070320	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
Paju/SKR/2010*	n/a	cattle	NVRQS	South Korea, Republic of	SEA/Mya-98
SKR/3/2011	n/a	porcine	WRLFMD	South Korea, Republic of	SEA/Mya-98
Yeoncheon/SKR/2010*	n/a	porcine	NVRQS	South Korea, Republic of	SEA/Mya-98
SKR/8/2011	n/a	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
HKN/15/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/12/2010	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
HKN/10/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/7/2010	JQ070303	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
MY/CHA/2010*	HQ652079	porcine	SiChuan University	China	SEA/Mya-98
VIT/NCVD-9/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
MOG/2004*	JQ070324	n/a	ARRIAH	Mongolia	SEA/Mya-98
MYA/7/98	DQ164925	bovine	WRLFMD	Myanmar	SEA/Mya-98
TAI/189/87*	KY091288	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
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
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/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	KY091283	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