

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

Genotyping Report

FMDV serotype: A
Country: Thailand
Year: 2016, 2017
Batch: WRLFMD/2017/00011
No. of sequences: 10
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/52/2016
Sender reference:	306/16R2B1
Location of origin:	Lam Luk Bua, Don Tum, Nakhon Pathom
Country of origin:	Thailand
Date of collection:	04/11/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33878, genome 33879, sequence viba_33880, sequencing info 33881	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_22500	TAI/9/2014	water buffalo	97.3	0	A	ASIA	Sea-97	
viba_21435	VIT/62/2013	cattle	97.3	0	A	ASIA	Sea-97	
viba_22488	TAI/6/2014	cattle	97.3	0	A	ASIA	Sea-97	
viba_21439	VIT/63/2013	cattle	97.3	0	A	ASIA	Sea-97	
viba_22394	LAO/1/2014	cattle	97.3	0	A	ASIA	Sea-97	
viba_22398	LAO/2/2014	cattle	97.3	0	A	ASIA	Sea-97	
viba_22402	LAO/3/2014	cattle	97.3	0	A	ASIA	Sea-97	
viba_22475	TAI/3/2014	cattle	97.3	0	A	ASIA	Sea-97	
viba_22645	VIT/20/2014	cattle	97.1	0	A	ASIA	Sea-97	
viba_21398	VIT/42/2013	cattle	97.1	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	91.7	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.3	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		87.2	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.7	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	82.0	0	A	ASIA	Iran-05	FAR-11
viba_636	IRN/78/2009		81.2	0	A	ASIA	Iran-05	FAR-09
viba_688	EGY/1/72	bovine	81.1	0	A	AFRICA	G-II	
viba_699	UKG/119/32		80.9	0	A	EURO-SA	A12	
viba_589	Bangkok/TAI/60		80.8	0	A	ASIA	A15	
viba_336	IRN/1/96	bovine	80.8	1	A	ASIA	Iran-96	

Virus sample name:	TAI/53/2016
Sender reference:	312-1/16R2B1
Location of origin:	Ta, Khun Tan, Chiang Rai
Country of origin:	Thailand
Date of collection:	08/11/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33882, genome 33883, sequence viba_33884, sequencing info 33885	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33916	TAI/5/2017	cattle	100.0	0	A	ASIA	Sea-97	
viba_33896	TAI/58/2016	cattle	99.8	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	99.7	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	99.7	0	A	ASIA	Sea-97	
viba_33908	TAI/3/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33904	TAI/2/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	99.2	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21209	TAI/14/2013	cattle	96.8	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	92.4	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.7	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.4	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.5	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	81.2	0	A	ASIA	Iran-05	FAR-11
viba_688	EGY/1/72	bovine	80.9	0	A	AFRICA	G-II	
viba_486	TUR/3/2010	cattle	80.7	0	A	ASIA	Iran-05	KSS-09
viba_699	UKG/119/32		80.7	0	A	EURO-SA	A12	
viba_636	IRN/78/2009		80.7	0	A	ASIA	Iran-05	FAR-09
viba_864	IND/40/2000	cattle	80.5	0	A	ASIA	G-VII	

Virus sample name:	TAI/54/2016
Sender reference:	316/16R1B1
Location of origin:	Wang Muang, Wang Muang, Saraburi
Country of origin:	Thailand
Date of collection:	11/11/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33886, genome 33887, sequence viba_33888, sequencing info 33889	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33896	TAI/58/2016	cattle	99.8	0	A	ASIA	Sea-97	
viba_33884	TAI/53/2016	cattle	99.7	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	99.7	0	A	ASIA	Sea-97	
viba_33916	TAI/5/2017	cattle	99.7	0	A	ASIA	Sea-97	
viba_33908	TAI/3/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33904	TAI/2/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	98.9	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21209	TAI/14/2013	cattle	96.8	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	92.4	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.7	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.4	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.2	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	80.7	0	A	ASIA	Iran-05	FAR-11
viba_688	EGY/1/72	bovine	80.6	0	A	AFRICA	G-II	
viba_486	TUR/3/2010	cattle	80.4	0	A	ASIA	Iran-05	KSS-09
viba_699	UKG/119/32		80.4	0	A	EURO-SA	A12	
viba_682	IRN/2/87	bovine	80.4	0	A	ASIA	Iran-87	
viba_557	IRN/15/2012	bovine	80.2	0	A	ASIA	Iran-05	SIS-12

Virus sample name:	TAI/57/2016
Sender reference:	362/16B3
Location of origin:	Sanam Yae, Tha Maka, Kanchanaburi
Country of origin:	Thailand
Date of collection:	29/11/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33890, genome 33891, sequence viba_33892, sequencing info 33893	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_23753	TAI/6/2016	cattle	96.7	0	A	ASIA	Sea-97	
viba_23757	TAI/7/2016	cattle	96.7	0	A	ASIA	Sea-97	
viba_23789	TAI/16/2016	cattle	96.5	0	A	ASIA	Sea-97	
viba_23773	TAI/11/2016	cattle	96.5	0	A	ASIA	Sea-97	
viba_23785	TAI/15/2016	cattle	96.5	0	A	ASIA	Sea-97	
viba_23781	TAI/13/2016	cattle	96.5	0	A	ASIA	Sea-97	
viba_30481	TAI/23/2016	cattle	96.5	0	A	ASIA	Sea-97	
viba_23769	TAI/10/2016	cattle	96.3	0	A	ASIA	Sea-97	
viba_22520	TAI/17/2014	cattle	96.3	0	A	ASIA	Sea-97	
viba_21147	Amur/2/RUS/2013	cattle	96.3	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	91.6	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		88.5	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.7	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.8	0	A	ASIA	A22	
viba_682	IRN/2/87	bovine	80.6	0	A	ASIA	Iran-87	
viba_403	TUR/1/2008	cattle	80.5	0	A	ASIA	Iran-05	ARD-07
viba_688	EGY/1/72	bovine	80.4	0	A	AFRICA	G-II	
viba_589	Bangkok/TAI/60		80.2	0	A	ASIA	A15	
viba_331	AFG/10/2010		79.9	0	A	ASIA	Iran-05	HER-10
viba_609	GHA/16/73	bovine	79.9	0	A	AFRICA	G-VI	

Virus sample name:	TAI/58/2016
Sender reference:	365/16B3
Location of origin:	Pak Chong, Pak Chong, Nakhon Ratchasima
Country of origin:	Thailand
Date of collection:	30/11/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33894, genome 33895, sequence viba_33896, sequencing info 33897	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33884	TAI/53/2016	cattle	99.8	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	99.8	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	99.8	0	A	ASIA	Sea-97	
viba_33916	TAI/5/2017	cattle	99.8	0	A	ASIA	Sea-97	
viba_33908	TAI/3/2017	cattle	99.5	0	A	ASIA	Sea-97	
viba_33904	TAI/2/2017	cattle	99.5	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	99.0	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	97.0	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	97.0	0	A	ASIA	Sea-97	
viba_21209	TAI/14/2013	cattle	97.0	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	92.5	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.9	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.6	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.3	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	81.1	0	A	ASIA	Iran-05	FAR-11
viba_688	EGY/1/72	bovine	80.8	0	A	AFRICA	G-II	
viba_636	IRN/78/2009		80.6	0	A	ASIA	Iran-05	FAR-09
viba_682	IRN/2/87	bovine	80.6	0	A	ASIA	Iran-87	
viba_486	TUR/3/2010	cattle	80.5	0	A	ASIA	Iran-05	KSS-09
viba_699	UKG/119/32		80.5	0	A	EURO-SA	A12	

Virus sample name:	TAI/60/2016
Sender reference:	371/16B3
Location of origin:	Kang Aen, Prasat, Surin
Country of origin:	Thailand
Date of collection:	30/11/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33898, genome 33899, sequence viba_33900, sequencing info 33901	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33884	TAI/53/2016	cattle	99.2	0	A	ASIA	Sea-97	
viba_33916	TAI/5/2017	cattle	99.2	0	A	ASIA	Sea-97	
viba_33896	TAI/58/2016	cattle	99.0	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	98.9	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	98.9	0	A	ASIA	Sea-97	
viba_33908	TAI/3/2017	cattle	98.6	0	A	ASIA	Sea-97	
viba_33904	TAI/2/2017	cattle	98.6	0	A	ASIA	Sea-97	
viba_22488	TAI/6/2014	cattle	96.8	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.7	0	A	ASIA	Sea-97	
viba_21422	VIT/58/2013	cattle	96.7	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	92.1	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		90.2	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.8	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	81.8	0	A	ASIA	A22	
viba_864	IND/40/2000	cattle	81.3	0	A	ASIA	G-VII	
viba_594	IRN/1/2011	bovine	81.2	0	A	ASIA	Iran-05	FAR-11
viba_173	UGA/13/66	bovine	80.7	0	A	AFRICA	G-VII	
viba_688	EGY/1/72	bovine	80.5	0	A	AFRICA	G-II	
viba_682	IRN/2/87	bovine	80.5	0	A	ASIA	Iran-87	
viba_699	UKG/119/32		80.4	0	A	EURO-SA	A12	

Virus sample name:	TAI/2/2017
Sender reference:	6/17B4
Location of origin:	Na Kham, Renu Nakhon, Nakhon Phanom
Country of origin:	Thailand
Date of collection:	11/01/2017
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33902, genome 33903, sequence viba_33904, sequencing info 33905	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33908	TAI/3/2017	cattle	100.0	0	A	ASIA	Sea-97	
viba_33896	TAI/58/2016	cattle	99.5	0	A	ASIA	Sea-97	
viba_33884	TAI/53/2016	cattle	99.4	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	99.4	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33916	TAI/5/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	98.6	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.5	0	A	ASIA	Sea-97	
viba_25992	TAI/15/2015	cattle	96.5	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	96.5	0	A	ASIA	Sea-97	

Most Closely Related Prototype Sequences

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sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_122	TAI/7/2003	bovine	92.4	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.7	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.4	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.5	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	81.2	0	A	ASIA	Iran-05	FAR-11
viba_486	TUR/3/2010	cattle	80.7	0	A	ASIA	Iran-05	KSS-09
viba_636	IRN/78/2009		80.7	0	A	ASIA	Iran-05	FAR-09
viba_688	EGY/1/72	bovine	80.6	0	A	AFRICA	G-II	
viba_864	IND/40/2000	cattle	80.5	0	A	ASIA	G-VII	
viba_589	Bangkok/TAI/60		80.4	0	A	ASIA	A15	

Virus sample name:	TAI/3/2017
Sender reference:	7/17B4
Location of origin:	Lam Phaya Klang, Muak Lek, Saraburi
Country of origin:	Thailand
Date of collection:	13/01/2017
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33906, genome 33907, sequence viba_33908, sequencing info 33909	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33904	TAI/2/2017	cattle	100.0	0	A	ASIA	Sea-97	
viba_33896	TAI/58/2016	cattle	99.5	0	A	ASIA	Sea-97	
viba_33884	TAI/53/2016	cattle	99.4	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	99.4	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33916	TAI/5/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	98.6	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.5	0	A	ASIA	Sea-97	
viba_25992	TAI/15/2015	cattle	96.5	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	96.5	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	92.4	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.7	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.4	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.5	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	81.2	0	A	ASIA	Iran-05	FAR-11
viba_486	TUR/3/2010	cattle	80.7	0	A	ASIA	Iran-05	KSS-09
viba_636	IRN/78/2009		80.7	0	A	ASIA	Iran-05	FAR-09
viba_688	EGY/1/72	bovine	80.6	0	A	AFRICA	G-II	
viba_864	IND/40/2000	cattle	80.5	0	A	ASIA	G-VII	
viba_589	Bangkok/TAI/60		80.4	0	A	ASIA	A15	

Virus sample name:	TAI/4/2017
Sender reference:	10/17R2B1
Location of origin:	Khlong Muang, Pak Chong, Nakhon Ratchasima
Country of origin:	Thailand
Date of collection:	19/01/2017
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33910, genome 33911, sequence viba_33912, sequencing info 33913	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33896	TAI/58/2016	cattle	99.8	0	A	ASIA	Sea-97	
viba_33884	TAI/53/2016	cattle	99.7	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	99.7	0	A	ASIA	Sea-97	
viba_33916	TAI/5/2017	cattle	99.7	0	A	ASIA	Sea-97	
viba_33908	TAI/3/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33904	TAI/2/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	98.9	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21209	TAI/14/2013	cattle	96.8	0	A	ASIA	Sea-97	

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_122	TAI/7/2003	bovine	92.4	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		90.0	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.6	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.3	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	81.1	0	A	ASIA	Iran-05	FAR-11
viba_688	EGY/1/72	bovine	80.9	0	A	AFRICA	G-II	
viba_486	TUR/3/2010	cattle	80.7	0	A	ASIA	Iran-05	KSS-09
viba_699	UKG/119/32		80.7	0	A	EURO-SA	A12	
viba_636	IRN/78/2009		80.6	0	A	ASIA	Iran-05	FAR-09
viba_682	IRN/2/87	bovine	80.6	0	A	ASIA	Iran-87	

Virus sample name:	TAI/5/2017
Sender reference:	15/17R3B2
Location of origin:	Khuan Lang, Hat Yai, Songkhla
Country of origin:	Thailand
Date of collection:	03/02/2017
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Sea-97
Sublineage:	
Sequence length:	630
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/06/2017
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	22/06/2017
Created:	29/06/2017
Last updated:	29/06/2017
VIBASys IDs: sample 33914, genome 33915, sequence viba_33916, sequencing info 33917	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33884	TAI/53/2016	cattle	100.0	0	A	ASIA	Sea-97	
viba_33896	TAI/58/2016	cattle	99.8	0	A	ASIA	Sea-97	
viba_33888	TAI/54/2016	cattle	99.7	0	A	ASIA	Sea-97	
viba_33912	TAI/4/2017	cattle	99.7	0	A	ASIA	Sea-97	
viba_33908	TAI/3/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33904	TAI/2/2017	cattle	99.4	0	A	ASIA	Sea-97	
viba_33900	TAI/60/2016	cattle	99.2	0	A	ASIA	Sea-97	
viba_21213	TAI/15/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21201	TAI/12/2013	cattle	96.8	0	A	ASIA	Sea-97	
viba_21209	TAI/14/2013	cattle	96.8	0	A	ASIA	Sea-97	

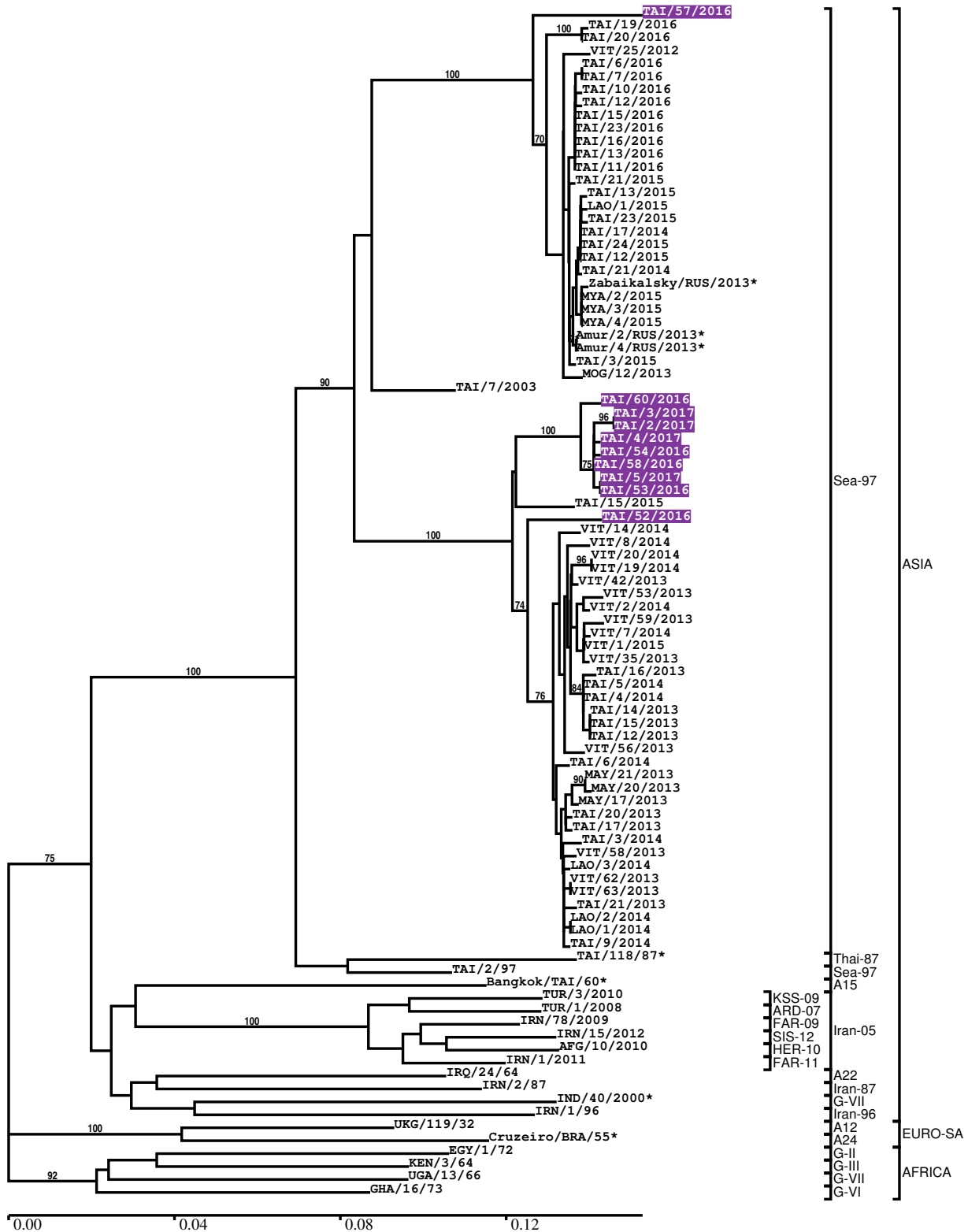
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_122	TAI/7/2003	bovine	92.4	0	A	ASIA	Sea-97	
viba_625	TAI/2/97		89.7	0	A	ASIA	Sea-97	
viba_630	TAI/118/87		86.4	0	A	ASIA	Thai-87	
viba_677	IRQ/24/64	bovine	82.5	0	A	ASIA	A22	
viba_594	IRN/1/2011	bovine	81.2	0	A	ASIA	Iran-05	FAR-11
viba_688	EGY/1/72	bovine	80.9	0	A	AFRICA	G-II	
viba_486	TUR/3/2010	cattle	80.7	0	A	ASIA	Iran-05	KSS-09
viba_699	UKG/119/32		80.7	0	A	EURO-SA	A12	
viba_636	IRN/78/2009		80.7	0	A	ASIA	Iran-05	FAR-09
viba_864	IND/40/2000	cattle	80.5	0	A	ASIA	G-VII	

Report on FMDV A in Thailand in 2016, 2017

Batch: WRLFMD/2017/00011



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_A
Query sequence set:	WRLFMD/2017/00011-Thailand-A (10 sequences)
Sequence database set:	allseqs_A (1664 sequences)
Prototype sequence set:	!prototypes_A (34 sequences)
Number of related sequences reported:	10
Minimal VP1 subsequence match length	600
Sequence alignment method:	muscle (default parameters)
Sequence alignment length:	633
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:	18
VIBASys version:	master-1.1.0-17-gf69a4d1

Sequences in the Phylogenetic Tree

All sequences in the tree are in taxonomic group FMDV/A

label	accession	host(s)	lab	country	taxonomic information
TAI/57/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/19/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/20/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
VIT/25/2012	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
TAI/6/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/7/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/10/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/12/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/15/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/23/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/16/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/13/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/11/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/21/2015	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/13/2015	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
LAO/1/2015	n/a	cattle	WRLFMD	Laos	ASIA/Sea-97
TAI/23/2015	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/17/2014	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/24/2015	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/12/2015	n/a	porcine	WRLFMD	Thailand	ASIA/Sea-97
TAI/21/2014	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
Zabaikalsky/RUS/2013*	n/a	cattle	n/a	Russia	ASIA/Sea-97
MYA/2/2015	n/a	bovine	WRLFMD	Myanmar	ASIA/Sea-97
MYA/3/2015	n/a	bovine	WRLFMD	Myanmar	ASIA/Sea-97
MYA/4/2015	n/a	bovine	WRLFMD	Myanmar	ASIA/Sea-97
Amur/2/RUS/2013*	n/a	cattle	ARRIAH	Russia	ASIA/Sea-97
Amur/4/RUS/2013*	n/a	cattle	ARRIAH	Russia	ASIA/Sea-97
TAI/3/2015	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
MOG/12/2013	n/a	cattle	WRLFMD	Mongolia	ASIA/Sea-97
TAI/7/2003	HQ116312	bovine	WRLFMD	Thailand	ASIA/Sea-97
TAI/60/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/3/2017	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/2/2017	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/4/2017	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/54/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/58/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97

continued on next page

label	accession	host(s)	lab	country	taxonomic information
TAI/5/2017	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/53/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/15/2015	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/52/2016	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
VIT/14/2014	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/8/2014	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/20/2014	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/19/2014	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/42/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/53/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/2/2014	n/a	water buffalo	WRLFMD	Vietnam	ASIA/Sea-97
VIT/59/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/7/2014	n/a	porcine	WRLFMD	Vietnam	ASIA/Sea-97
VIT/1/2015	n/a	porcine	WRLFMD	Vietnam	ASIA/Sea-97
VIT/35/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
TAI/16/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/5/2014	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/4/2014	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/14/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/15/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/12/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
VIT/56/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
TAI/6/2014	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
MAY/21/2013	n/a	cattle	WRLFMD	Malaysia	ASIA/Sea-97
MAY/20/2013	n/a	cattle	WRLFMD	Malaysia	ASIA/Sea-97
MAY/17/2013	n/a	cattle	WRLFMD	Malaysia	ASIA/Sea-97
TAI/20/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/17/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
TAI/3/2014	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
VIT/58/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
LAO/3/2014	n/a	cattle	WRLFMD	Laos	ASIA/Sea-97
VIT/62/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
VIT/63/2013	n/a	cattle	WRLFMD	Vietnam	ASIA/Sea-97
TAI/21/2013	n/a	cattle	WRLFMD	Thailand	ASIA/Sea-97
LAO/2/2014	n/a	cattle	WRLFMD	Laos	ASIA/Sea-97
LAO/1/2014	n/a	cattle	WRLFMD	Laos	ASIA/Sea-97
TAI/9/2014	n/a	water buffalo	WRLFMD	Thailand	ASIA/Sea-97
TAI/118/87*	EF208777	n/a	WRLFMD	Thailand	ASIA/Thai-87
TAI/2/97	EF208778	n/a	WRLFMD	Thailand	ASIA/Sea-97
Bangkok/TAI/60*	AY593755	n/a	PIADC	Thailand	ASIA/A15
TUR/3/2010	KY091294	cattle	WRLFMD	Turkey	ASIA/Iran-05/KSS-09
TUR/1/2008	FJ755133	cattle	WRLFMD	Turkey	ASIA/Iran-05/ARD-07
IRN/78/2009	KY091291	n/a	WRLFMD	Iran	ASIA/Iran-05/FAR-09
IRN/15/2012	KY091297	bovine	WRLFMD	Iran	ASIA/Iran-05/SIS-12
AFG/10/2010	KY091293	n/a	WRLFMD	Afghanistan	ASIA/Iran-05/HER-10
IRN/1/2011	KY091292	bovine	WRLFMD	Iran	ASIA/Iran-05/FAR-11
IRQ/24/64	AY593763	bovine	PIADC	Iraq	ASIA/A22
IRN/2/87	EF208770	bovine	WRLFMD	Iran	ASIA/Iran-87
IND/40/2000*	AF390646	cattle	PD-FMD	India	ASIA/G-VII
IRN/1/96	EF208771	bovine	WRLFMD	Iran	ASIA/Iran-96
UKG/119/32	M10975	n/a	PIADC	United Kingdom	EURO-SA/A12
Cruzeiro/BRA/55*	AY593768	bovine	PIADC	Brazil	EURO-SA/A24
EGY/1/72	EF208756	bovine	WRLFMD	Egypt	AFRICA/G-II
KEN/3/64	AY593761	n/a	PIADC	Kenya	AFRICA/G-III
UGA/13/66	KF561705	bovine	WRLFMD	Uganda	AFRICA/G-VII
GHA/16/73	KF561698	bovine	WRLFMD	Ghana	AFRICA/G-VI

*, not a WRLFMD Reference Number

n/a, not available