

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

Genotyping Report

FMDV serotype: A
Country: Iran
Year: 2016
Batch: WRLFMD/2016/00018
No. of sequences: 7
Report date: 6th July 2016
Report generated by: Nick Knowles
Report checked by: Jemma Wadsworth

Analysis Parameters

VP1 subsequence extractor: vp1_A
Query sequence set: WRLFMD/2016/00018-Iran-A (7 sequences)
Sequence database set: allseqs_A (1361 sequences)
Prototype sequence set: prototypes_A (34 sequences)
Number of related sequences reported: 10
Minimal VP1 subsequence match length: 600
VIBASys version: reflabs-1.0.2



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

email: reporting@pirbright.ac.uk

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Virus sample name:	IRN/1/2016
Sender reference:	IR/95/16
Location of origin:	Qom
Country of origin:	Iran
Date of collection:	04/01/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	G-VII
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	16/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	30/06/2016
VIBASys IDs: sample 27627, genome 27628, sequence viba_27629, sequencing info 27630	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_27649	IRN/20/2016	cattle	99.2	0	A	ASIA	G-VII	
viba_25136	ARM/1/2015		99.1	0	A	ASIA	G-VII	
viba_25144	ARM/3/2015		99.1	0	A	ASIA	G-VII	
viba_27645	IRN/12/2016	cattle	99.1	0	A	ASIA	G-VII	
viba_25818	IRN/12/2015	cattle	98.9	0	A	ASIA	G-VII	
viba_25854	IRN/25/2015	cattle	98.9	0	A	ASIA	G-VII	
viba_25140	ARM/2/2015		98.9	0	A	ASIA	G-VII	
viba_25858	IRN/27/2015	cattle	98.9	0	A	ASIA	G-VII	
viba_27641	IRN/11/2016	cattle	98.7	0	A	ASIA	G-VII	
viba_27653	IRN/23/2016	cattle	98.7	0	A	ASIA	G-VII	

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_864	IND/40/2000	cattle	90.1	0	A	ASIA	G-VII	
viba_843	SAU/16/95		89.6	0	A	ASIA	G-VII	
viba_677	IRQ/24/64	bovine	85.1	0	A	ASIA	A22	
viba_336	IRN/1/96	bovine	84.3	1	A	ASIA	Iran-96	
viba_682	IRN/2/87	bovine	82.9	0	A	ASIA	Iran-87	
viba_699	UKG/119/32		82.8	0	A	EURO-SA	A12	
viba_308	IRN/9/2011	bovine	82.4	0	A	ASIA	Iran-05	QAZ-11
viba_414	AFG/6/2007	bovine	82.0	0	A	ASIA	Iran-05	AFG-07
viba_403	TUR/1/2008	cattle	81.9	0	A	ASIA	Iran-05	ARD-07
viba_331	AFG/10/2010		81.8	0	A	ASIA	Iran-05	HER-10

Virus sample name:	IRN/6/2016
Sender reference:	IR/95/14
Location of origin:	East Azerbaijan
Country of origin:	Iran
Date of collection:	06/01/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	Iran-05
Sublineage:	SIS-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	17/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	05/07/2016
VIBASys IDs: sample 27631, genome 27632, sequence viba_27633, sequencing info 27634	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_25304	TUR/14/2015	cattle	99.2	0	A	ASIA	Iran-05	SIS-10
viba_25814	IRN/10/2015	cattle	99.2	0	A	ASIA	Iran-05	SIS-10
viba_25810	IRN/9/2015	cattle	98.9	0	A	ASIA	Iran-05	SIS-10
viba_25838	IRN/19/2015	cattle	98.9	0	A	ASIA	Iran-05	SIS-10
viba_25850	IRN/24/2015	cattle	98.7	0	A	ASIA	Iran-05	SIS-10
viba_22370	IRN/5/2014	cattle	98.1	0	A	ASIA	Iran-05	SIS-10
viba_20959	IRN/34/2013	cattle	98.1	0	A	ASIA	Iran-05	SIS-10
viba_20927	IRN/18/2013	cattle	97.9	0	A	ASIA	Iran-05	SIS-10
viba_20955	IRN/33/2013	cattle	97.9	0	A	ASIA	Iran-05	SIS-10
viba_22382	IRN/8/2014	cattle	97.9	0	A	ASIA	Iran-05	SIS-10

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_791	IRN/125/2010	bovine	94.9	0	A	ASIA	Iran-05	SIS-10
viba_414	AFG/6/2007	bovine	92.9	0	A	ASIA	Iran-05	AFG-07
viba_319	BAR/6/2008	bovine	92.1	0	A	ASIA	Iran-05	BAR-08
viba_331	AFG/10/2010		91.9	0	A	ASIA	Iran-05	HER-10
viba_636	IRN/78/2009		91.6	0	A	ASIA	Iran-05	FAR-09
viba_133	IRN/1/2005	cattle	91.5	0	A	ASIA	Iran-05	
viba_557	IRN/15/2012	bovine	91.2	0	A	ASIA	Iran-05	SIS-12
viba_780	IRN/9/2010	cattle	91.0	0	A	ASIA	Iran-05	ESF-10
viba_403	TUR/1/2008	cattle	90.8	0	A	ASIA	Iran-05	ARD-07
viba_429	TUR/33/2008	cattle	90.7	0	A	ASIA	Iran-05	EZM-07

Virus sample name:	IRN/8/2016
Sender reference:	IR/95/1
Location of origin:	Tehran
Country of origin:	Iran
Date of collection:	04/02/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	G-VII
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	16/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	05/07/2016
VIBASys IDs: sample 27635, genome 27636, sequence viba_27637, sequencing info 27638	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_25136	ARM/1/2015		99.4	0	A	ASIA	G-VII	
viba_25144	ARM/3/2015		99.4	0	A	ASIA	G-VII	
viba_27649	IRN/20/2016	cattle	99.2	0	A	ASIA	G-VII	
viba_25818	IRN/12/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25313	Van/TUR/203/2015		99.2	0	A	ASIA	G-VII	
viba_25854	IRN/25/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25140	ARM/2/2015		99.2	0	A	ASIA	G-VII	
viba_25858	IRN/27/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_27645	IRN/12/2016	cattle	99.1	0	A	ASIA	G-VII	
viba_25822	IRN/13/2015	cattle	98.9	0	A	ASIA	G-VII	

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_864	IND/40/2000	cattle	90.0	0	A	ASIA	G-VII	
viba_843	SAU/16/95		89.5	0	A	ASIA	G-VII	
viba_336	IRN/1/96	bovine	84.4	1	A	ASIA	Iran-96	
viba_677	IRQ/24/64	bovine	84.3	0	A	ASIA	A22	
viba_699	UKG/119/32		82.7	0	A	EURO-SA	A12	
viba_682	IRN/2/87	bovine	82.4	0	A	ASIA	Iran-87	
viba_403	TUR/1/2008	cattle	82.1	0	A	ASIA	Iran-05	ARD-07
viba_308	IRN/9/2011	bovine	82.1	0	A	ASIA	Iran-05	QAZ-11
viba_331	AFG/10/2010		82.0	0	A	ASIA	Iran-05	HER-10
viba_589	Bangkok/TAI/60		81.8	0	A	ASIA	A15	

Virus sample name:	IRN/11/2016
Sender reference:	IR/95/2
Location of origin:	Qazvin
Country of origin:	Iran
Date of collection:	27/02/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	G-VII
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	17/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	30/06/2016
VIBASys IDs: sample 27639, genome 27640, sequence viba_27641, sequencing info 27642	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_27653	IRN/23/2016	cattle	99.4	0	A	ASIA	G-VII	
viba_25136	ARM/1/2015		99.4	0	A	ASIA	G-VII	
viba_25144	ARM/3/2015		99.4	0	A	ASIA	G-VII	
viba_27645	IRN/12/2016	cattle	99.4	0	A	ASIA	G-VII	
viba_27649	IRN/20/2016	cattle	99.2	0	A	ASIA	G-VII	
viba_25818	IRN/12/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25854	IRN/25/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25140	ARM/2/2015		99.2	0	A	ASIA	G-VII	
viba_25858	IRN/27/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25822	IRN/13/2015	cattle	98.9	0	A	ASIA	G-VII	

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_864	IND/40/2000	cattle	90.0	0	A	ASIA	G-VII	
viba_843	SAU/16/95		89.5	0	A	ASIA	G-VII	
viba_677	IRQ/24/64	bovine	84.6	0	A	ASIA	A22	
viba_336	IRN/1/96	bovine	84.1	1	A	ASIA	Iran-96	
viba_682	IRN/2/87	bovine	83.0	0	A	ASIA	Iran-87	
viba_699	UKG/119/32		82.6	0	A	EURO-SA	A12	
viba_403	TUR/1/2008	cattle	82.2	0	A	ASIA	Iran-05	ARD-07
viba_308	IRN/9/2011	bovine	82.1	0	A	ASIA	Iran-05	QAZ-11
viba_319	BAR/6/2008	bovine	82.0	0	A	ASIA	Iran-05	BAR-08
viba_594	IRN/1/2011	bovine	82.0	0	A	ASIA	Iran-05	FAR-11

Virus sample name:	IRN/12/2016
Sender reference:	IR/95/20
Location of origin:	Ardebil
Country of origin:	Iran
Date of collection:	29/02/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	G-VII
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	18/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	05/07/2016
VIBASys IDs: sample 27643, genome 27644, sequence viba_27645, sequencing info 27646	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_25136	ARM/1/2015		99.7	0	A	ASIA	G-VII	
viba_25144	ARM/3/2015		99.7	0	A	ASIA	G-VII	
viba_27649	IRN/20/2016	cattle	99.5	0	A	ASIA	G-VII	
viba_25818	IRN/12/2015	cattle	99.5	0	A	ASIA	G-VII	
viba_25854	IRN/25/2015	cattle	99.5	0	A	ASIA	G-VII	
viba_25140	ARM/2/2015		99.5	0	A	ASIA	G-VII	
viba_25858	IRN/27/2015	cattle	99.5	0	A	ASIA	G-VII	
viba_27641	IRN/11/2016	cattle	99.4	0	A	ASIA	G-VII	
viba_27653	IRN/23/2016	cattle	99.4	0	A	ASIA	G-VII	
viba_25822	IRN/13/2015	cattle	99.2	0	A	ASIA	G-VII	

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_864	IND/40/2000	cattle	90.3	0	A	ASIA	G-VII	
viba_843	SAU/16/95		90.1	0	A	ASIA	G-VII	
viba_677	IRQ/24/64	bovine	84.6	0	A	ASIA	A22	
viba_336	IRN/1/96	bovine	84.4	1	A	ASIA	Iran-96	
viba_682	IRN/2/87	bovine	83.2	0	A	ASIA	Iran-87	
viba_699	UKG/119/32		82.9	0	A	EURO-SA	A12	
viba_403	TUR/1/2008	cattle	82.2	0	A	ASIA	Iran-05	ARD-07
viba_308	IRN/9/2011	bovine	82.1	0	A	ASIA	Iran-05	QAZ-11
viba_331	AFG/10/2010		82.1	0	A	ASIA	Iran-05	HER-10
viba_319	BAR/6/2008	bovine	82.0	0	A	ASIA	Iran-05	BAR-08

Virus sample name:	IRN/20/2016
Sender reference:	IR/95/5
Location of origin:	Yazd
Country of origin:	Iran
Date of collection:	02/04/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	G-VII
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	18/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	30/06/2016
VIBASys IDs: sample 27647, genome 27648, sequence viba_27649, sequencing info 27650	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_25136	ARM/1/2015		99.8	0	A	ASIA	G-VII	
viba_25144	ARM/3/2015		99.8	0	A	ASIA	G-VII	
viba_25818	IRN/12/2015	cattle	99.7	0	A	ASIA	G-VII	
viba_25854	IRN/25/2015	cattle	99.7	0	A	ASIA	G-VII	
viba_25140	ARM/2/2015		99.7	0	A	ASIA	G-VII	
viba_25858	IRN/27/2015	cattle	99.7	0	A	ASIA	G-VII	
viba_27645	IRN/12/2016	cattle	99.5	0	A	ASIA	G-VII	
viba_25822	IRN/13/2015	cattle	99.4	0	A	ASIA	G-VII	
viba_25313	Van/TUR/203/2015		99.4	0	A	ASIA	G-VII	
viba_25826	IRN/14/2015	cattle	99.4	0	A	ASIA	G-VII	

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_864	IND/40/2000	cattle	90.4	0	A	ASIA	G-VII	
viba_843	SAU/16/95		89.9	0	A	ASIA	G-VII	
viba_336	IRN/1/96	bovine	84.6	1	A	ASIA	Iran-96	
viba_677	IRQ/24/64	bovine	84.5	0	A	ASIA	A22	
viba_699	UKG/119/32		83.1	0	A	EURO-SA	A12	
viba_682	IRN/2/87	bovine	82.9	0	A	ASIA	Iran-87	
viba_308	IRN/9/2011	bovine	82.6	0	A	ASIA	Iran-05	QAZ-11
viba_414	AFG/6/2007	bovine	82.5	0	A	ASIA	Iran-05	AFG-07
viba_331	AFG/10/2010		82.3	0	A	ASIA	Iran-05	HER-10
viba_319	BAR/6/2008	bovine	82.2	0	A	ASIA	Iran-05	BAR-08

Virus sample name:	IRN/23/2016
Sender reference:	IR/95/3
Location of origin:	Alborz
Country of origin:	Iran
Date of collection:	07/04/2016
Host species:	cattle
Serotype:	A
Topotype:	ASIA
Lineage:	G-VII
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	21/06/2016
Primers:	A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R
Received for sequencing:	28/06/2016
Created:	30/06/2016
Last updated:	30/06/2016
VIBASys IDs: sample 27651, genome 27652, sequence viba_27653, sequencing info 27654	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_27641	IRN/11/2016	cattle	99.4	0	A	ASIA	G-VII	
viba_25136	ARM/1/2015		99.4	0	A	ASIA	G-VII	
viba_25144	ARM/3/2015		99.4	0	A	ASIA	G-VII	
viba_27645	IRN/12/2016	cattle	99.4	0	A	ASIA	G-VII	
viba_27649	IRN/20/2016	cattle	99.2	0	A	ASIA	G-VII	
viba_25818	IRN/12/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25854	IRN/25/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25140	ARM/2/2015		99.2	0	A	ASIA	G-VII	
viba_25858	IRN/27/2015	cattle	99.2	0	A	ASIA	G-VII	
viba_25822	IRN/13/2015	cattle	98.9	0	A	ASIA	G-VII	

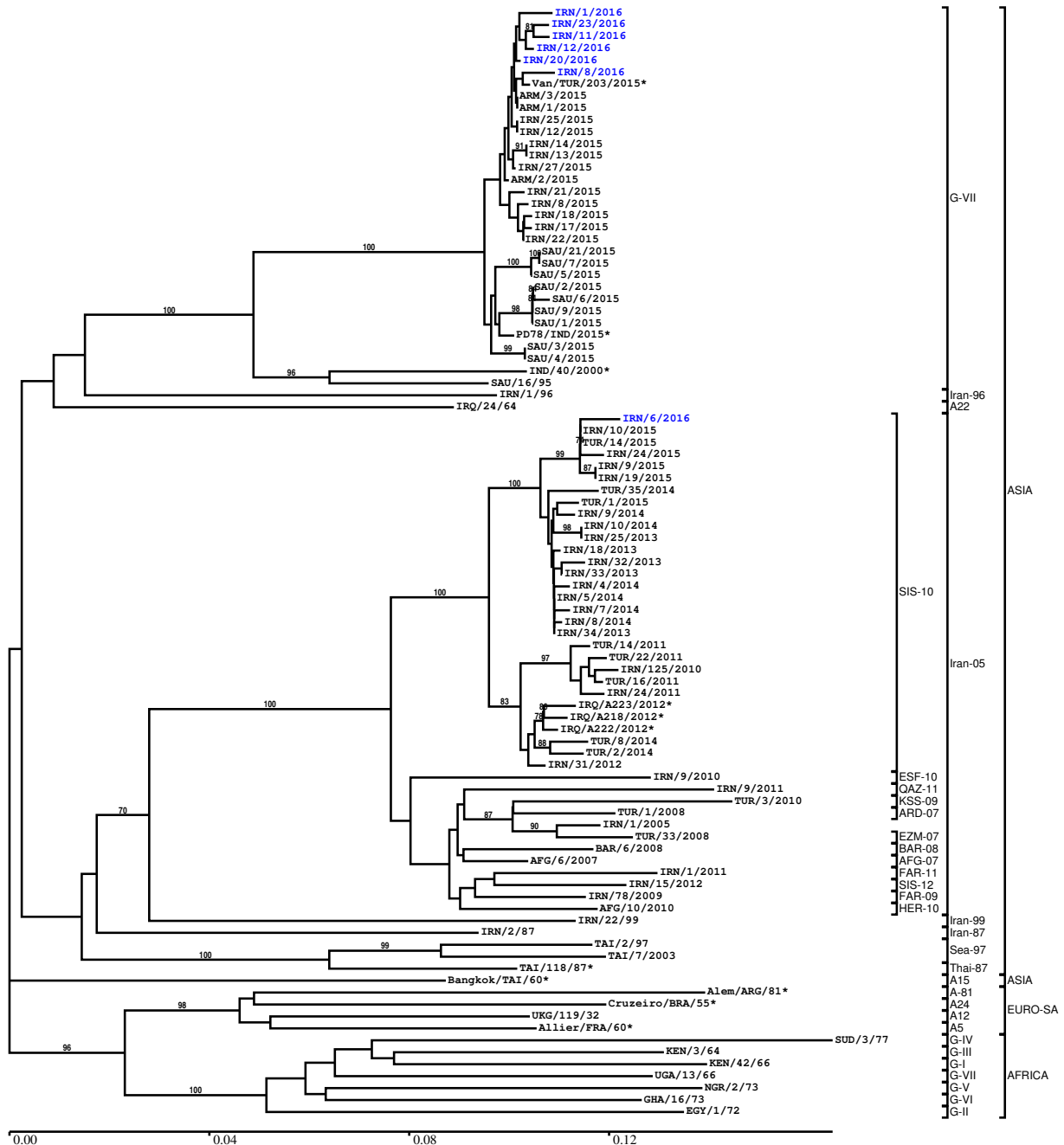
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_864	IND/40/2000	cattle	90.4	0	A	ASIA	G-VII	
viba_843	SAU/16/95		89.5	0	A	ASIA	G-VII	
viba_677	IRQ/24/64	bovine	85.7	0	A	ASIA	A22	
viba_336	IRN/1/96	bovine	84.1	1	A	ASIA	Iran-96	
viba_699	UKG/119/32		83.3	0	A	EURO-SA	A12	
viba_682	IRN/2/87	bovine	83.2	0	A	ASIA	Iran-87	
viba_475	IRN/22/99		82.3	0	A	ASIA	Iran-99	
viba_403	TUR/1/2008	cattle	82.2	0	A	ASIA	Iran-05	ARD-07
viba_308	IRN/9/2011	bovine	82.1	0	A	ASIA	Iran-05	QAZ-11
viba_414	AFG/6/2007	bovine	82.0	0	A	ASIA	Iran-05	AFG-07

Report on FMDV A in Iran in 2016

Batch: WRLFMD/2016/00018



Sequence alignment method:	muscle (default parameters)
Phylogeny reconstruction method:	fdnadist, fneighbor
Number of bootstrap samples:	1000
Displaying bootstrap values above:	70.0%
Number of sequences in tree capped at:	100
*, not a WRLFMD Reference Number	

Sequences in the Phylogenetic Tree

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

label	accession	host(s)	lab	country	taxonomic information
IRN/1/2016	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/23/2016	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/11/2016	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/12/2016	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/20/2016	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/8/2016	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
Van/TUR/203/2015*	n/a	n/a	FMDI	Turkey	ASIA/G-VII
ARM/3/2015	n/a	n/a	ARRIAH	Armenia	ASIA/G-VII
ARM/1/2015	n/a	n/a	ARRIAH	Armenia	ASIA/G-VII
IRN/25/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/12/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/14/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/13/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/27/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
ARM/2/2015	n/a	n/a	ARRIAH	Armenia	ASIA/G-VII
IRN/21/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/8/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/18/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/17/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
IRN/22/2015	n/a	cattle	WRLFMD	Iran	ASIA/G-VII
SAU/21/2015	n/a	bovine	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/7/2015	n/a	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/5/2015	n/a	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/2/2015	n/a	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/6/2015	n/a	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/9/2015	n/a	bovine	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/1/2015	KU127247	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
PD78/IND/2015*	n/a	n/a	PD-FMD	India	ASIA/G-VII
SAU/3/2015	n/a	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
SAU/4/2015	n/a	cattle	WRLFMD	Saudi Arabia	ASIA/G-VII
IND/40/2000*	AF390646	cattle	PD-FMD	India	ASIA/G-VII
SAU/16/95	EU553874	n/a	WRLFMD	Saudi Arabia	ASIA/G-VII
IRN/1/96	EF208771	bovine	WRLFMD	Iran	ASIA/Iran-96
IRQ/24/64	AY593763	bovine	PIADC	Iraq	ASIA/A22
IRN/6/2016	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/10/2015	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
TUR/14/2015	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
IRN/24/2015	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/9/2015	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/19/2015	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
TUR/35/2014	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
TUR/1/2015	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
IRN/9/2014	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/10/2014	n/a	bovine	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/25/2013	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/18/2013	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/32/2013	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/33/2013	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/4/2014	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/5/2014	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/7/2014	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/8/2014	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/34/2013	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
TUR/14/2011	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
TUR/22/2011	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
IRN/125/2010	n/a	bovine	WRLFMD	Iran	ASIA/Iran-05/SIS-10
TUR/16/2011	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
IRN/24/2011	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRQ/A223/2012*	n/a	n/a	FMDI-Ankara	Iraq	ASIA/Iran-05/SIS-10
IRQ/A218/2012*	n/a	n/a	FMDI-Ankara	Iraq	ASIA/Iran-05/SIS-10

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label	accession	host(s)	lab	country	taxonomic information
IRQ/A222/2012*	n/a	n/a	FMDI-Ankara	Iraq	ASIA/Iran-05/SIS-10
TUR/8/2014	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
TUR/2/2014	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/SIS-10
IRN/31/2012	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/SIS-10
IRN/9/2010	n/a	cattle	WRLFMD	Iran	ASIA/Iran-05/ESF-10
IRN/9/2011	n/a	bovine	WRLFMD	Iran	ASIA/Iran-05/QAZ-11
TUR/3/2010	n/a	cattle	WRLFMD	Turkey	ASIA/Iran-05/KSS-09
TUR/1/2008	FJ755133	cattle	WRLFMD	Turkey	ASIA/Iran-05/ARD-07
IRN/1/2005	EF208769	cattle	WRLFMD	Iran	ASIA/Iran-05
TUR/33/2008	FJ755155	cattle	WRLFMD	Turkey	ASIA/Iran-05/EZM-07
BAR/6/2008	FJ755010	bovine	WRLFMD	Bahrain	ASIA/Iran-05/BAR-08
AFG/6/2007	FJ755007	bovine	WRLFMD	Afghanistan	ASIA/Iran-05/AFG-07
IRN/1/2011	n/a	bovine	WRLFMD	Iran	ASIA/Iran-05/FAR-11
IRN/15/2012	n/a	bovine	WRLFMD	Iran	ASIA/Iran-05/SIS-12
IRN/78/2009	n/a	n/a	WRLFMD	Iran	ASIA/Iran-05/FAR-09
AFG/10/2010	n/a	n/a	WRLFMD	Afghanistan	ASIA/Iran-05/HER-10
IRN/22/99	EF208772	n/a	WRLFMD	Iran	ASIA/Iran-99
IRN/2/87	EF208770	bovine	WRLFMD	Iran	ASIA/Iran-87
TAI/2/97	EF208778	n/a	WRLFMD	Thailand	ASIA/Sea-97
TAI/7/2003	HQ116312	bovine	WRLFMD	Thailand	ASIA/Sea-97
TAI/118/87*	EF208777	n/a	WRLFMD	Thailand	ASIA/Thai-87
Bangkok/TAI/60*	AY593755	n/a	PIADC	Thailand	ASIA/A15
Alem/ARG/81*	AJ306219	n/a	INTA-Argentina	Argentina	EURO-SA/A-81
Cruzeiro/BRA/55*	AY593768	bovine	PIADC	Brazil	EURO-SA/A24
UKG/119/32	M10975	n/a	PIADC	United Kingdom	EURO-SA/A12
Allier/FRA/60*	AY593780	n/a	PIADC	France	EURO-SA/A5
SUD/3/77	GU566064	n/a	WRLFMD	Sudan	AFRICA/G-IV
KEN/3/64	AY593761	n/a	PIADC	Kenya	AFRICA/G-III
KEN/42/66	KF561699	n/a	WRLFMD	Kenya	AFRICA/G-I
UGA/13/66	KF561705	bovine	WRLFMD	Uganda	AFRICA/G-VII
NGR/2/73	KF561704	bovine	WRLFMD	Niger	AFRICA/G-V
GHA/16/73	KF561698	bovine	WRLFMD	Ghana	AFRICA/G-VI
EGY/1/72	EF208756	bovine	WRLFMD	Egypt	AFRICA/G-II

*, not a WRLFMD Reference Number

n/a, not available