

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

Genotyping Report

FMDV serotype:	O
Country:	Iraq
Year:	2025
Batch:	WRLFMD/2025/000006
No. of sequences:	7
Report date:	20th March 2025
Report generated by:	██████████
Report checked by:	██████████



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

email: reporting@pirbright.ac.uk

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Virus sample name:	IRQ/8/2025
Sender reference:	Sample 10 L62
Location of origin:	Abu El Khassib, Basrah
Country of origin:	Iraq
Date of collection:	17/02/2025
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	12/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55852, genome 55853, sequence viba_55854, sequencing info 55855	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55858	IRQ/10/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55862	IRQ/14/2025	water buffalo	99.7	0	O	ME-SA	SA-2018	
viba_55878	IRQ/24/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55870	IRQ/20/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55866	IRQ/17/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55874	IRQ/21/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.3	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55663	TUR/Igdir/2024	sheep	97.9	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	93.7	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_27877	SRL/2/97	bovine	90.4	0	O	ME-SA	Srl-97	
viba_766	IRN/31/2009	cattle	90.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	90.2	0	O	ME-SA	PanAsia-2	
viba_505	TUR/264/2009		89.9	0	O	ME-SA	PanAsia-2	SAN-09
viba_491	TUR/257/2008		89.9	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	89.7	0	O	ME-SA	PanAsia-2	BAL-09
viba_9021	LAO/2/2006	cattle	89.4	0	O	ME-SA	PanAsia	
viba_285	UKG/35/2001	porcine	89.3	0	O	ME-SA	PanAsia	

Virus sample name:	IRQ/10/2025
Sender reference:	Sample 7 L81
Location of origin:	Hawija, Kirkuk
Country of origin:	Iraq
Date of collection:	18/02/2025
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	11/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55856, genome 55857, sequence viba_55858, sequencing info 55859	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55862	IRQ/14/2025	water buffalo	99.7	0	O	ME-SA	SA-2018	
viba_55854	IRQ/8/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55878	IRQ/24/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55870	IRQ/20/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55866	IRQ/17/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55874	IRQ/21/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.6	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	98.4	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	98.4	0	O	ME-SA	SA-2018	
viba_55663	TUR/Igdir/2024	sheep	98.3	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.0	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	90.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	90.4	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	90.4	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	89.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_505	TUR/264/2009		89.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_9021	LAO/2/2006	cattle	89.7	0	O	ME-SA	PanAsia	
viba_491	TUR/257/2008		89.7	0	O	ME-SA	PanAsia-2	TER-08
viba_354	PAK/16/2010	cattle	89.3	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	IRQ/14/2025
Sender reference:	Sample 13 L108
Location of origin:	Al Amiryia, Baghdad
Country of origin:	Iraq
Date of collection:	20/02/2025
Host species:	water buffalo
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	12/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55860, genome 55861, sequence viba_55862, sequencing info 55863	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55858	IRQ/10/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55854	IRQ/8/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55878	IRQ/24/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55870	IRQ/20/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55866	IRQ/17/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55874	IRQ/21/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	98.4	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	98.4	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.3	0	O	ME-SA	SA-2018	
viba_55663	TUR/Igdir/2024	sheep	98.3	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	93.7	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	90.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	90.0	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	90.0	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	89.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_505	TUR/264/2009		89.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_9021	LAO/2/2006	cattle	89.7	0	O	ME-SA	PanAsia	
viba_491	TUR/257/2008		89.7	0	O	ME-SA	PanAsia-2	TER-08
viba_285	UKG/35/2001	porcine	89.6	0	O	ME-SA	PanAsia	

Virus sample name:	IRQ/17/2025
Sender reference:	Sample 17 L189
Location of origin:	Al Khalis, Diyala
Country of origin:	Iraq
Date of collection:	25/02/2025
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	12/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55864, genome 55865, sequence viba_55866, sequencing info 55867	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55858	IRQ/10/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55862	IRQ/14/2025	water buffalo	99.7	0	O	ME-SA	SA-2018	
viba_55854	IRQ/8/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55878	IRQ/24/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55870	IRQ/20/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55874	IRQ/21/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.3	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55663	TUR/Igdir/2024	sheep	97.9	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	93.7	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	90.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	90.2	0	O	ME-SA	PanAsia-2	
viba_505	TUR/264/2009		89.9	0	O	ME-SA	PanAsia-2	SAN-09
viba_491	TUR/257/2008		89.9	0	O	ME-SA	PanAsia-2	TER-08
viba_9021	LAO/2/2006	cattle	89.6	0	O	ME-SA	PanAsia	
viba_666	IRN/18/2010	cattle	89.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	89.4	0	O	ME-SA	PanAsia	

Virus sample name:	IRQ/20/2025
Sender reference:	Sample 20 L174
Location of origin:	Al Salam, Missan
Country of origin:	Iraq
Date of collection:	25/02/2025
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	13/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55868, genome 55869, sequence viba_55870, sequencing info 55871	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55858	IRQ/10/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55862	IRQ/14/2025	water buffalo	99.7	0	O	ME-SA	SA-2018	
viba_55854	IRQ/8/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55878	IRQ/24/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55866	IRQ/17/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55874	IRQ/21/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.3	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55663	TUR/Igdir/2024	sheep	97.9	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	93.7	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	90.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	90.0	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	90.0	0	O	ME-SA	PanAsia-2	
viba_505	TUR/264/2009		89.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_491	TUR/257/2008		89.7	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	89.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_9021	LAO/2/2006	cattle	89.4	0	O	ME-SA	PanAsia	
viba_285	UKG/35/2001	porcine	89.3	0	O	ME-SA	PanAsia	

Virus sample name:	IRQ/21/2025
Sender reference:	Sample 21 L176
Location of origin:	Bani Hatem, Missan
Country of origin:	Iraq
Date of collection:	25/02/2025
Host species:	water buffalo
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	12/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55872, genome 55873, sequence viba_55874, sequencing info 55875	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55858	IRQ/10/2025	cattle	99.5	0	O	ME-SA	SA-2018	
viba_55862	IRQ/14/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55854	IRQ/8/2025	cattle	99.5	0	O	ME-SA	SA-2018	
viba_55878	IRQ/24/2025	cattle	99.5	0	O	ME-SA	SA-2018	
viba_55870	IRQ/20/2025	cattle	99.5	0	O	ME-SA	SA-2018	
viba_55866	IRQ/17/2025	cattle	99.5	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.1	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	97.9	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	97.9	0	O	ME-SA	SA-2018	
viba_55663	TUR/Igdir/2024	sheep	97.8	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	93.5	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	90.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	90.2	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	89.9	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		89.9	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	89.7	0	O	ME-SA	PanAsia-2	BAL-09
viba_505	TUR/264/2009		89.6	0	O	ME-SA	PanAsia-2	SAN-09
viba_285	UKG/35/2001	porcine	89.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	89.3	0	O	ME-SA	PanAsia	

Virus sample name:	IRQ/24/2025
Sender reference:	Sample 24 L177
Location of origin:	Al-Wihdah, Missan
Country of origin:	Iraq
Date of collection:	25/02/2025
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	13/03/2025
Primers:	O-1C244F & O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	18/03/2025
Created:	20/03/2025
Last updated:	20/03/2025
VIBASys IDs: sample 55876, genome 55877, sequence viba_55878, sequencing info 55879	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_55858	IRQ/10/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55862	IRQ/14/2025	water buffalo	99.7	0	O	ME-SA	SA-2018	
viba_55854	IRQ/8/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55870	IRQ/20/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55866	IRQ/17/2025	cattle	99.7	0	O	ME-SA	SA-2018	
viba_55874	IRQ/21/2025	water buffalo	99.5	0	O	ME-SA	SA-2018	
viba_55643	Otarod_2008/IRN/2023	cattle	98.3	0	O	ME-SA	SA-2018	
viba_55715	GER/BB/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_55742	GER/1/2025	water buffalo	98.1	0	O	ME-SA	SA-2018	
viba_53732	ICFMD/IND/273/2021	goat	97.9	0	O	ME-SA	SA-2018	

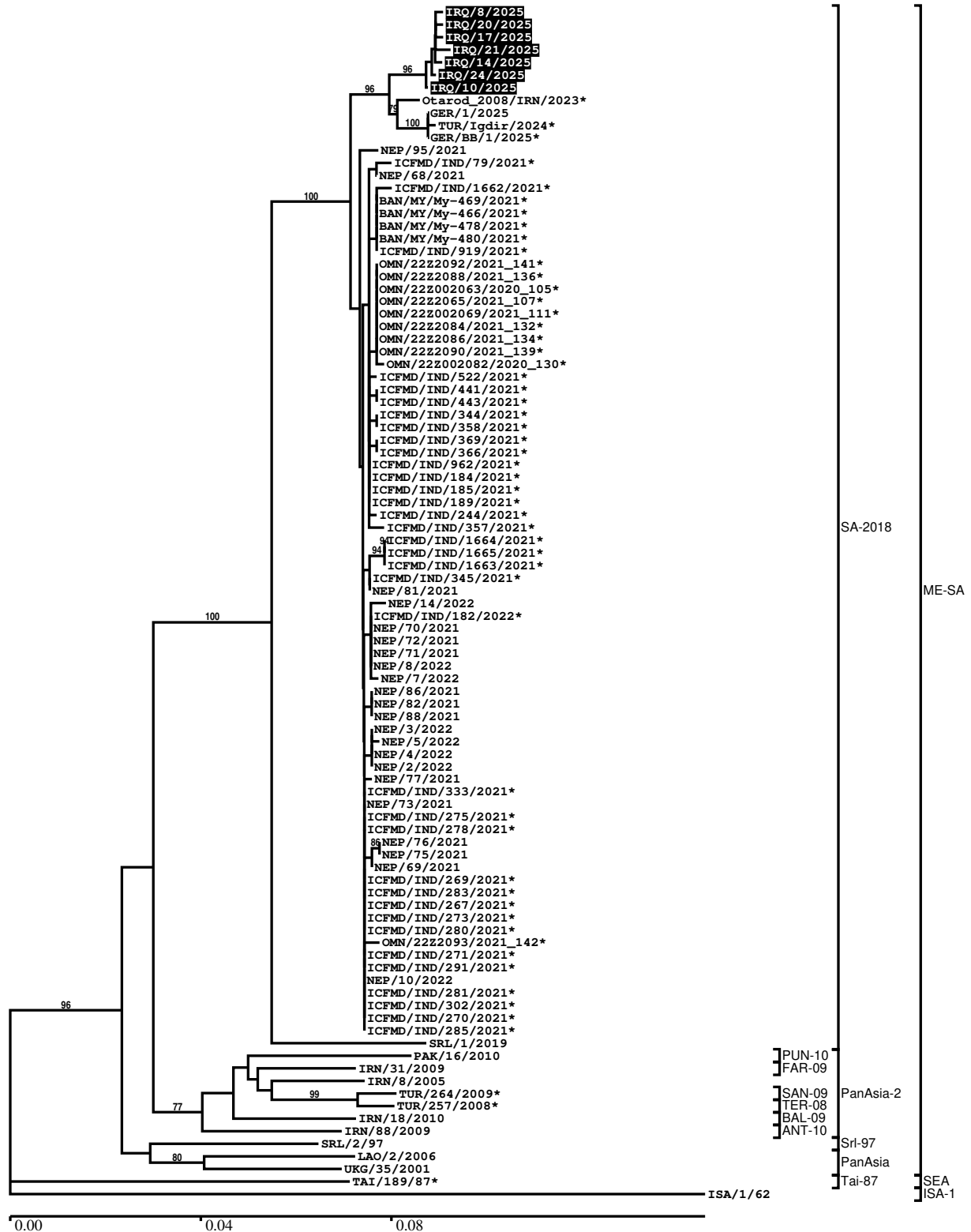
Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	93.8	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		90.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	90.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	90.2	0	O	ME-SA	PanAsia-2	
viba_505	TUR/264/2009		89.9	0	O	ME-SA	PanAsia-2	SAN-09
viba_491	TUR/257/2008		89.9	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	89.7	0	O	ME-SA	PanAsia-2	BAL-09
viba_9021	LAO/2/2006	cattle	89.6	0	O	ME-SA	PanAsia	
viba_285	UKG/35/2001	porcine	89.4	0	O	ME-SA	PanAsia	

Report on FMDV O in Iraq in 2025

Batch: WRLFMD/2025/000006



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2025/000006-Iraq-O (7 sequences)
Sequence database set:	allseqs_O (6296 sequences)
Prototype sequence set:	!prototypes_O (58 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:	11
VIBASys version:	reflabs-1.1.2

Sequences in the Phylogenetic Tree

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

label	accession	host(s)	lab	country	taxonomic information
IRQ/8/2025	n/a	cattle	WRLFMD	Iraq	ME-SA/SA-2018
IRQ/20/2025	n/a	cattle	WRLFMD	Iraq	ME-SA/SA-2018
IRQ/17/2025	n/a	cattle	WRLFMD	Iraq	ME-SA/SA-2018
IRQ/21/2025	n/a	water buffalo	WRLFMD	Iraq	ME-SA/SA-2018
IRQ/14/2025	n/a	water buffalo	WRLFMD	Iraq	ME-SA/SA-2018
IRQ/24/2025	n/a	cattle	WRLFMD	Iraq	ME-SA/SA-2018
IRQ/10/2025	n/a	cattle	WRLFMD	Iraq	ME-SA/SA-2018
Otarod_2008/IRN/2023*	OR991332	cattle	UNIV-TEHRAN	Iran	ME-SA/SA-2018
GER/1/2025	n/a	water buffalo	WRLFMD	Germany	ME-SA/SA-2018
TUR/Igdir/2024*	n/a	sheep	FMDI	Türkiye	ME-SA/SA-2018
GER/BB/1/2025*	n/a	water buffalo	FLI	Germany	ME-SA/SA-2018
NEP/95/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/79/2021*	OQ847005	cattle	ICAR-DFMD	India	ME-SA/SA-2018
NEP/68/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/1662/2021*	OQ847046	cattle	ICAR-DFMD	India	ME-SA/SA-2018
BAN/MY/My-469/2021*	OP320456	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
BAN/MY/My-466/2021*	OP320455	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
BAN/MY/My-478/2021*	OP320457	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
BAN/MY/My-480/2021*	OP320458	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
ICFMD/IND/919/2021*	OQ847041	cattle	ICAR-DFMD	India	ME-SA/SA-2018
OMN/22Z2092/2021_141*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2088/2021_136*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z002063/2020_105*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2065/2021_107*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z002069/2021_111*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2084/2021_132*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2086/2021_134*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2090/2021_139*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z002082/2020_130*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
ICFMD/IND/522/2021*	OQ846963	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/441/2021*	OQ846962	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/443/2021*	OQ847027	cattle	ICAR-DFMD	India	ME-SA/SA-2018

continued on next page

label	accession	host(s)	lab	country	taxonomic information
ICFMD/IND/344/2021*	OQ847023	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/358/2021*	OQ847025	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/369/2021*	OQ847026	n/a	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/366/2021*	OQ846959	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/962/2021*	OQ847043	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/184/2021*	OQ846960	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/185/2021*	OQ847006	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/189/2021*	OQ847007	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/244/2021*	OQ847010	n/a	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/357/2021*	OQ846964	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/1664/2021*	OQ847048	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/1665/2021*	OQ847049	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/1663/2021*	OQ847047	cattle	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/345/2021*	OQ846954	cattle	ICAR-DFMD	India	ME-SA/SA-2018
NEP/81/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/14/2022	n/a	goat	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/182/2022*	OQ847053	cattle	ICAR-DFMD	India	ME-SA/SA-2018
NEP/70/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/72/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/71/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/8/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/7/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/86/2021	n/a	n/a	WRLFMD	Nepal	ME-SA/SA-2018
NEP/82/2021	n/a	water buffalo	WRLFMD	Nepal	ME-SA/SA-2018
NEP/88/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/3/2022	n/a	goat	WRLFMD	Nepal	ME-SA/SA-2018
NEP/5/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/4/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/2/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/77/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/333/2021*	OQ847022	cattle	ICAR-DFMD	India	ME-SA/SA-2018
NEP/73/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/275/2021*	OQ847015	goat	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/278/2021*	OQ847016	sheep	ICAR-DFMD	India	ME-SA/SA-2018
NEP/76/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/75/2021	n/a	water buffalo	WRLFMD	Nepal	ME-SA/SA-2018
NEP/69/2021	n/a	n/a	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/269/2021*	OQ847012	goat	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/283/2021*	OQ847018	goat	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/267/2021*	OQ847011	sheep	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/273/2021*	OQ847014	goat	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/280/2021*	OQ846957	sheep	ICAR-DFMD	India	ME-SA/SA-2018
OMN/22Z2093/2021_142*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
ICFMD/IND/271/2021*	OQ846958	goat	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/291/2021*	OQ846955	goat	ICAR-DFMD	India	ME-SA/SA-2018
NEP/10/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
ICFMD/IND/281/2021*	OQ847017	sheep	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/302/2021*	OQ846956	sheep	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/270/2021*	OQ847013	goat	ICAR-DFMD	India	ME-SA/SA-2018
ICFMD/IND/285/2021*	OQ847019	sheep	ICAR-DFMD	India	ME-SA/SA-2018
SRL/1/2019	n/a	cattle	WRLFMD	Sri Lanka	ME-SA/SA-2018
PAK/16/2010	KY091285	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-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	Turkiye	ME-SA/PanAsia-2/SAN-09
TUR/257/2008*	n/a	n/a	FMDI-Ankara	Turkiye	ME-SA/PanAsia-2/TER-08
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
SRL/2/97	AJ303531	bovine	WRLFMD	Sri Lanka	ME-SA/Srl-97
LAO/2/2006	EU667451	cattle	WRLFMD	Laos	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA/Tai-87
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

*, not a WRLFMD Reference Number

n/a, not available