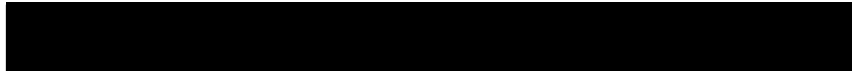




## FMD Genotyping Report

Lab Reference WRL batch Number: WRLMEG/2022/00010

Sender Details:



Date Received: 17/3/2022

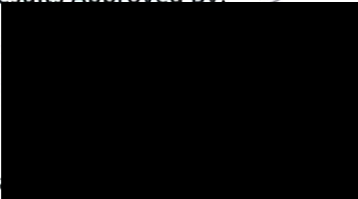
Country of Origin\*: Israel

Sequencing work has now been completed in respect of the VP1 sequences recently submitted to the WRLFMD and the details are attached.

Please note that all of our phylogenetic trees can be accessed via the internet at:

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

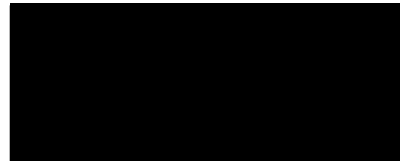
Results Approved By:



D

17/3/2022

Official Stamp:



To help us improve the quality of our service, please send any suggestions or requests to the Reference Laboratory by email ([reflabsfeedback@pirbright.ac.uk](mailto:reflabsfeedback@pirbright.ac.uk)).

\* Data supplied by the customer

WRLMEG/2022/00010

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

## Genotyping Report

FMDV serotype: O  
Country: Israel  
Year: 2022  
Batch: WRLMEG/2022/00010  
No. of sequences: 7  
Report date: 17th March 2022  
Report generated by: Nick Knowles  
Report checked by: Jemma Wadsworth

This report is prepared on behalf of the Kimron Veterinary Institute (Beit Dagon, Hamerkaz, Israel) and covers VP1 sequences submitted to the WRLFMD on 17 March 2022.



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

email: [reporting@pirbright.ac.uk](mailto:reporting@pirbright.ac.uk)

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Virus sample name:	442228/ISR/2022
Sender reference:	442228_Maale_Shomron_Cattle
Location of origin:	Ma'ale Shomron
Country of origin:	Israel
Date of collection:	2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50398, genome 50399, sequence viba_50400, sequencing info 50401	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_49951	JOR/574/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50404	443555/ISR/2022	sheep	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50412	445247/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50424	446186/ISR/2022	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_293	BHU/3/2009	cattle	89.3	0	O	ME-SA	Ind-2001	d
viba_650	IRN/8/2005	ovine	88.9	0	O	ME-SA	PanAsia-2	
viba_491	TUR/257/2008		88.8	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_850	NEP/1/2015	cattle	88.3	1	O	ME-SA	PanAsia-2	KAT-15
viba_354	PAK/16/2010	cattle	88.2	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.2	0	O	ME-SA	PanAsia-2	QOM-15

Virus sample name:	443555/ISR/2022
Sender reference:	443555_Kfar_Yehoshua_farm_8_Sheep
Location of origin:	Kfar Yehoshua
Country of origin:	Israel
Date of collection:	2022
Host species:	sheep
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50402, genome 50403, sequence viba_50404, sequencing info 50405	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_49951	JOR/574/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50412	445247/ISR/2022	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50424	446186/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49963	JOR/2T/2021	sheep	99.8	1	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.1	0	O	ME-SA	PanAsia-2	
viba_293	BHU/3/2009	cattle	89.1	0	O	ME-SA	Ind-2001	d
viba_491	TUR/257/2008		88.9	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	88.7	0	O	ME-SA	PanAsia	
viba_354	PAK/16/2010	cattle	88.3	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.3	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		88.3	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	444156/ISR/2022
Sender reference:	444156_Nahalal_farm_6_Cattle
Location of origin:	Nahalal
Country of origin:	Israel
Date of collection:	2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50406, genome 50407, sequence viba_50408, sequencing info 50409	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_49951	JOR/574/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50416	445733/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50404	443555/ISR/2022	sheep	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50412	445247/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.1	0	O	ME-SA	PanAsia-2	
viba_293	BHU/3/2009	cattle	89.0	0	O	ME-SA	Ind-2001	d
viba_491	TUR/257/2008		88.8	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_354	PAK/16/2010	cattle	88.2	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.2	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		88.2	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	445247/ISR/2022
Sender reference:	445247_Bet_Shearim-_farm_56_Cattle
Location of origin:	Bet She'arim
Country of origin:	Israel
Date of collection:	2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50410, genome 50411, sequence viba_50412, sequencing info 50413	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_49951	JOR/574/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50404	443555/ISR/2022	sheep	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	100.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_50424	446186/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49963	JOR/2T/2021	sheep	99.8	1	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.1	0	O	ME-SA	PanAsia-2	
viba_293	BHU/3/2009	cattle	89.1	0	O	ME-SA	Ind-2001	d
viba_491	TUR/257/2008		88.9	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	88.7	0	O	ME-SA	PanAsia	
viba_354	PAK/16/2010	cattle	88.3	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.3	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		88.3	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	445733/ISR/2022
Sender reference:	445733_Sde_Yaakov_Cattle
Location of origin:	Sde Ya'akov
Country of origin:	Israel
Date of collection:	2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50414, genome 50415, sequence viba_50416, sequencing info 50417	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_50408	444156/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49951	JOR/574/2021	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_50404	443555/ISR/2022	sheep	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_50412	445247/ISR/2022	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.3	0	O	ME-SA	PanAsia-2	
viba_491	TUR/257/2008		88.9	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_293	BHU/3/2009	cattle	88.8	0	O	ME-SA	Ind-2001	d
viba_285	UKG/35/2001	porcine	88.7	0	O	ME-SA	PanAsia	
viba_354	PAK/16/2010	cattle	88.3	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.3	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		88.3	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	446115/ISR/2022
Sender reference:	446115_Kalia_Cattle
Location of origin:	Kalia
Country of origin:	Israel
Date of collection:	2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50418, genome 50419, sequence viba_50420, sequencing info 50421	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_50424	446186/ISR/2022	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_49951	JOR/574/2021	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_50404	443555/ISR/2022	sheep	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_50412	445247/ISR/2022	cattle	99.5	0	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.2	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	88.8	0	O	ME-SA	PanAsia-2	
viba_293	BHU/3/2009	cattle	88.8	0	O	ME-SA	Ind-2001	d
viba_491	TUR/257/2008		88.6	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	88.3	0	O	ME-SA	PanAsia	
viba_354	PAK/16/2010	cattle	88.0	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		88.0	0	O	ME-SA	PanAsia-2	SAN-09



Virus sample name:	446186/ISR/2022
Sender reference:	446186_Kibbutz_Metzer_Cattle
Location of origin:	Kibbutz Metzer
Country of origin:	Israel
Date of collection:	2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia-2
Sublineage:	ANT-10
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	17/03/2022
Last updated:	17/03/2022
VIBASys IDs: sample 50422, genome 50423, sequence viba_50424, sequencing info 50425	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_49951	JOR/574/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49955	JOR/603/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49959	JOR/609/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_49250	435458/PAT/2021	sheep	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50404	443555/ISR/2022	sheep	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50006	JOR/1/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50014	JOR/7/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50010	JOR/6/2021	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50412	445247/ISR/2022	cattle	99.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_50420	446115/ISR/2022	cattle	99.7	0	O	ME-SA	PanAsia-2	ANT-10

#### 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_719	IRN/88/2009		91.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_293	BHU/3/2009	cattle	89.0	0	O	ME-SA	Ind-2001	d
viba_650	IRN/8/2005	ovine	88.9	0	O	ME-SA	PanAsia-2	
viba_491	TUR/257/2008		88.8	0	O	ME-SA	PanAsia-2	TER-08
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_354	PAK/16/2010	cattle	88.2	0	O	ME-SA	PanAsia-2	PUN-10
viba_860	IRN/6/2015	cattle	88.2	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		88.2	0	O	ME-SA	PanAsia-2	SAN-09

Report on FMDV O in Israel in 2022

Batch: WRLMEG/2022/00010



\*, not a WRLFMD Reference Number

## Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLMEG/2022/00010-Israel-O (7 sequences)
Sequence database set:	allseqs_O (5559 sequences)
Prototype sequence set:	!prototypes_O (49 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
446115/ISR/2022*	n/a	cattle	KVI	Israel	ME-SA/PanAsia-2/ANT-10
446186/ISR/2022*	n/a	cattle	KVI	Israel	ME-SA/PanAsia-2/ANT-10
445733/ISR/2022*	n/a	cattle	KVI	Israel	ME-SA/PanAsia-2/ANT-10
444156/ISR/2022*	n/a	cattle	KVI	Israel	ME-SA/PanAsia-2/ANT-10
445247/ISR/2022*	n/a	cattle	KVI	Israel	ME-SA/PanAsia-2/ANT-10
442228/ISR/2022*	n/a	cattle	KVI	Israel	ME-SA/PanAsia-2/ANT-10
JOR/1/2021	n/a	cattle	WRLFMD	Jordan	ME-SA/PanAsia-2/ANT-10
443555/ISR/2022*	n/a	sheep	KVI	Israel	ME-SA/PanAsia-2/ANT-10
JOR/1/2021/JUST*	n/a	cattle	JUST	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/609/2021*	n/a	cattle	JUST	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/603/2021*	n/a	cattle	JUST	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/2T/2021*	n/a	sheep	JUST	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/7/2021	n/a	cattle	WRLFMD	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/574/2021*	n/a	cattle	JUST	Jordan	ME-SA/PanAsia-2/ANT-10
435458/PAT/2021*	n/a	sheep	KVI	Palestinian AT	ME-SA/PanAsia-2/ANT-10
JOR/6/2021	n/a	cattle	WRLFMD	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/10/2021	n/a	sheep	WRLFMD	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/16/2021/JUST*	n/a	sheep	JUST	Jordan	ME-SA/PanAsia-2/ANT-10
JOR/15/2021/JUST*	n/a	sheep	JUST	Jordan	ME-SA/PanAsia-2/ANT-10

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label	accession	host(s)	lab	country	taxonomic information
PAK/4/2021	n/a	water buffalo	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/14/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/13/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/24/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/27/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/23/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/15/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/1/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/9/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/8/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/7/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/12/2021	n/a	water buffalo	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/6/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/3/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/40/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/16/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/17/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/21/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/18/2021	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/8/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/15/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
IRN/4/2020	n/a	bovine	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
PAK/32/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/53/2019	n/a	water buffalo	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/47/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/18/2014*	MF374991	cattle	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
NIAB/SIN/PAK/46/2014*	MF374989	cattle	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Gujrat2/PUN/PAK/2017*	MK342183	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Gujrat/PUN/PAK/2017*	MK342182	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
AFG/16/2017	n/a	cattle	WRLFMD	Afghanistan	ME-SA/PanAsia-2/ANT-10
TUR/448/2017*	n/a	sheep	FMDI	Turkey	ME-SA/PanAsia-2/ANT-10
PAK/18/2017	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/226/2017*	MH085208	n/a	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
IRN/1/2018	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/11/2017	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10

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label	accession	host(s)	lab	country	taxonomic information
IRN/37/2016	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/35/2016	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/36/2016	n/a	sheep	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/5/2017	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/3/2017	n/a	sheep	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/8/2017	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
AFG/35/2017	n/a	cattle	WRLFMD	Afghanistan	ME-SA/PanAsia-2/ANT-10
AFG/54/2017	n/a	bovine	WRLFMD	Afghanistan	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/223/2017*	MH085207	n/a	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/222/2017*	MH085206	n/a	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
IRN/31/2016	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/220/2017*	MH085205	n/a	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Sahiwal1/PUN/PAK*	MK292143	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/218/2017*	MH085204	n/a	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
NIAB/PUN/PAK/205/2017*	MF140436	water buffalo	NIAB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Faislabad1/PUN/PAK*	MK292142	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
AFG/44/2017	n/a	bovine	WRLFMD	Afghanistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Bhakhar3/PUN/PAK/2018*	MK342186	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
PAK/7/2016	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Lodrah1/PUN/PAK/2017*	MK342179	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Lodrah2/PUN/PAK/2017*	MK342180	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Lodrah3/PUN/PAK/2017*	MK342181	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Jhang2/PUN/PAK/2018*	MK342190	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Bhakhar5/PUN/PAK/2017*	MK342188	water buffalo	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Bhakhar2/PUN/PAK/2018*	MK342185	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Bhakhar1/PUN/PAK/2017*	MK342184	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
VRI/CAMB/Bhakhar4/PUN/PAK/2018*	MK342187	cattle	VRI-CAMB	Pakistan	ME-SA/PanAsia-2/ANT-10
AFG/23/2017	n/a	cattle	WRLFMD	Afghanistan	ME-SA/PanAsia-2/ANT-10
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
NEP/1/2015	MN276045	cattle	WRLFMD	Nepal	ME-SA/PanAsia-2/KAT-15
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/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
IRN/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
TUR/257/2008*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/TER-08

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label	accession	host(s)	lab	country	taxonomic information
TUR/264/2009*	n/a	n/a	FMDI- Ankara	Turkey	ME-SA/PanAsia-2/SAN-09
IRN/6/2015	MN276044	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/QOM-15
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
BHU/3/2009	KM921814	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

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n/a, not available