FMD Genotyping Report

Lab Reference WRL batch Number: WRLFMD/2026/000005

Sender Details: [redacted]

Date Received: 01/05/2026

Country of Origin*: Indonesia

Work has now been completed in respect of the sequence recently submitted and the details are as attached.

Please note that all our phylogenetic trees can be accessed via the internet at: http://www.wrlfmd.org/

Results Approved By: [redacted]

Date: 07/05/2026

Official Stamp: [redacted]

[redacted]

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).

* Data supplied by the customer

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

FMDV Genotyping Report

Generated from: FMDtype | FMDV Genotyping Tool
Downloaded on: 01 May 2026
Citation: WRLFMD. 2026. FMDV Genotyping Report [WRLFMD/2026/000005]. (Accessed 01/05/26)

FMDV serotype: O
Country: Indonesia
Year: 2024-2025
Batch: WRLFMD/2026/000005
No. of sequences: 20
Reported date: 01 May 2026

WRLFMD Website: https://www.wrlfmd.org/
Email: reporting@pirbright.ac.uk

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FMDtype is supported through funding from

Virus sample: ISA/27/2024

Sample details

Reception Date:	2026-02-05
Sender reference:	4. ISA/Tasikmalaya/AR320601240189-5/2024
Location of origin:	Cikawungading/Cipatujah, Tasikmalaya, Java Barat, Java
Country of origin:	Indonesia
Date of collection:	2024-12-23
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK2
Material Harvest Date:	2026-03-25
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297264	ISA/Karanganyar/A04223309/2022		97.37	0	O	ME-SA	Ind-2001	e
297255	ISA/Pemalang/A04222613/2022	Cattle	97.14	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	97.13	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	97.09	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	97.06	0	O	ME-SA	Ind-2001	e
659078	ISA/Bojonegoro/PVT/Pls-14/2023	Cattle	97.02	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		97.00	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.47	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.63	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.54	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.22	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.79	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	89.42	0	O	ME-SA	Srl-97	None
12780	PAK/58/2012	Cattle	88.84	0	O	ME-SA	PanAsia-2	ICT-12
12855	PAK/7/2016	Cattle	88.84	0	O	ME-SA	PanAsia-2	PUN-16
17602	UKG/35/2001		88.49	0	O	ME-SA	PanAsia	None
212	AFG/30/2010		88.35	0	O	ME-SA	PanAsia-2	KHO-10

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

Virus sample: ISA/31/2024

Sample details

Reception Date:	2026-02-05
Sender reference:	20. ISA/Wonogiri/AR340101240479-W1/2024
Location of origin:	Bulukerto/Bulurejo, Wonogiri, Java Tengah, Java
Country of origin:	Indonesia
Date of collection:	2024-12-30
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.05	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		95.89	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	95.89	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	95.89	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	95.79	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	95.75	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	95.74	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	95.74	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	95.74	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		95.74	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.52	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.20	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		89.75	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.59	0	O	ME-SA	Ind-2001	a
14798	SYR/18/62		88.35	0	O	WCSA-1	Syr-62	None
17330	UAE/4/2008	Gazelle	88.31	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.19	0	O	ME-SA	Srl-97	None
12855	PAK/7/2016	Cattle	87.99	0	O	ME-SA	PanAsia-2	PUN-16
8912	IRN/88/2009		87.72	0	O	ME-SA	PanAsia-2	ANT-10
10481	LAO/2/2006	Cattle	87.52	0	O	ME-SA	PanAsia	None

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

Virus sample: ISA/32/2024

Sample details

Reception Date:	2026-02-05
Sender reference:	6. ISA/BandungBarat/AR320601250004-P1/2025
Location of origin:	Padaasih/Cisarua, Bandung Barat, Java Barat, Java
Country of origin:	Indonesia
Date of collection:	2024-12-31
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.55	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	96.44	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	96.40	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		96.37	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.16	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.84	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.22	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.05	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.77	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.64	0	O	ME-SA	Srl-97	None
14798	SYR/18/62		88.49	0	O	WCSA-1	Syr-62	None
10481	LAO/2/2006	Cattle	88.15	0	O	ME-SA	PanAsia	None
12855	PAK/7/2016	Cattle	88.13	0	O	ME-SA	PanAsia-2	PUN-16
8912	IRN/88/2009		87.86	0	O	ME-SA	PanAsia-2	ANT-10

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

Virus sample: ISA/1/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	21. ISA/Pati/AR340101250012-P1-3/2025
Location of origin:	Sonorejo/Jakenan, Pati, Java Tengah, Java
Country of origin:	Indonesia
Date of collection:	2025-01-02
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659082	ISA/5/2024	Cattle	98.58	0	O	ME-SA	Ind-2001	e
659083	ISA/6/2024	Cattle	98.58	0	O	ME-SA	Ind-2001	e
659086	ISA/11/2024	Cattle	98.58	0	O	ME-SA	Ind-2001	e
659087	ISA/12/2024	Cattle	98.58	0	O	ME-SA	Ind-2001	e
659089	ISA/15/2024	Cattle	98.58	0	O	ME-SA	Ind-2001	e
659095	ISA/Pasuruan/PVT/Pls-6/2024	Cattle	98.54	0	O	ME-SA	Ind-2001	e
659081	ISA/4/2024	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659084	ISA/7/2024	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659088	ISA/13/2024	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659090	ISA/18/2024	Cattle	98.42	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	92.73	0	O	ME-SA	Ind-2001	e
11999	OMN/7/2001		89.75	0	O	ME-SA	Ind-2001	b
3294	BHU/3/2009	Cattle	89.57	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		89.12	0	O	ME-SA	Ind-2001	a
12780	PAK/58/2012	Cattle	87.68	0	O	ME-SA	PanAsia-2	ICT-12
17330	UAE/4/2008	Gazelle	87.52	0	O	ME-SA	Ind-2001	c
15944	Manisa/TUR/69_(O1)		87.36	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	87.20	0	O	ME-SA	PanAsia	None
14504	SRL/2/97	Bovine	87.20	0	O	ME-SA	Srl-97	None
12855	PAK/7/2016	Cattle	87.18	0	O	ME-SA	PanAsia-2	PUN-16

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

Virus sample: ISA/2/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	25. ISA/Magetan/AR340101250004-MG3/2025
Location of origin:	Kedungguwo/Sukomoro, Magetan, Java Timur, Java
Country of origin:	Indonesia
Date of collection:	2025-01-02
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.55	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	96.44	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	96.40	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		96.37	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.16	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.84	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.22	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.05	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.77	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.64	0	O	ME-SA	Srl-97	None
14798	SYR/18/62		88.49	0	O	WCSA-1	Syr-62	None
10481	LAO/2/2006	Cattle	88.15	0	O	ME-SA	PanAsia	None
12855	PAK/7/2016	Cattle	88.13	0	O	ME-SA	PanAsia-2	PUN-16
8912	IRN/88/2009		87.86	0	O	ME-SA	PanAsia-2	ANT-10

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

Virus sample: ISA/3/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	37. ISA/Limapuluh Kota/A01250001-2/2025
Location of origin:	Mungo/Luak, Limapuluh Kota, Sumatera Barat, Sumatera
Country of origin:	Indonesia
Date of collection:	2025-01-02
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297235	ISA/Langkat/A01220761/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297236	ISA/DeliSerdang/A01220762/2022	Cattle	97.40	0	O	ME-SA	Ind-2001	e
297230	PVT-SP10/ISA/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297234	ISA/Tamiang/01220759-P10/2022	Cattle	97.25	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		97.21	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		97.16	0	O	ME-SA	Ind-2001	e
297229	PVT-SP4/ISA/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.31	0	O	ME-SA	Ind-2001	e
11999	OMN/7/2001		91.48	0	O	ME-SA	Ind-2001	b
3294	BHU/3/2009	Cattle	91.15	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		90.54	0	O	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	89.57	0	O	ME-SA	Srl-97	None
8912	IRN/88/2009		89.30	0	O	ME-SA	PanAsia-2	ANT-10
12780	PAK/58/2012	Cattle	89.26	0	O	ME-SA	PanAsia-2	ICT-12
17330	UAE/4/2008	Gazelle	89.10	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	89.08	0	O	ME-SA	PanAsia-2	PUN-16
16370	TUR/257/2008		88.98	0	O	ME-SA	PanAsia-2	SAN-09

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

Virus sample: ISA/4/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	38. ISA/Limapuluh Kota/A01250001-4/2025
Location of origin:	Mungo/Luak, Limapuluh Kota, Sumatera Barat, Sumatera
Country of origin:	Indonesia
Date of collection:	2025-01-02
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297235	ISA/Langkat/A01220761/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297236	ISA/DeliSerdang/A01220762/2022	Cattle	97.24	0	O	ME-SA	Ind-2001	e
297230	PVT-SP10/ISA/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
297234	ISA/Tamiang/01220759-P10/2022	Cattle	97.09	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		97.04	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		97.00	0	O	ME-SA	Ind-2001	e
297229	PVT-SP4/ISA/2022	Cattle	97.00	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.47	0	O	ME-SA	Ind-2001	e
11999	OMN/7/2001		91.33	0	O	ME-SA	Ind-2001	b
3294	BHU/3/2009	Cattle	91.31	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		90.69	0	O	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	89.73	0	O	ME-SA	Srl-97	None
8912	IRN/88/2009		89.46	0	O	ME-SA	PanAsia-2	ANT-10
12780	PAK/58/2012	Cattle	89.42	0	O	ME-SA	PanAsia-2	ICT-12
17330	UAE/4/2008	Gazelle	89.26	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	89.24	0	O	ME-SA	PanAsia-2	PUN-16
212	AFG/30/2010		89.12	0	O	ME-SA	PanAsia-2	KHO-10

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

Virus sample: ISA/5/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	39. ISA/Tanah Datar/A01250002-3/2025
Location of origin:	Batipuh Baruah/Batipuh, Tanah Datar, Sumatera Barat, Sumatera
Country of origin:	Indonesia
Date of collection:	2025-01-03
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297236	ISA/DeliSerdang/A01220762/2022	Cattle	97.56	0	O	ME-SA	Ind-2001	e
297235	ISA/Langkat/A01220761/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		97.37	0	O	ME-SA	Ind-2001	e
297251	ISA/Klaten/A04222596/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297243	ISA/Boyolali/A04222562/2022	Cattle	97.30	0	O	ME-SA	Ind-2001	e
297233	ISA/Tamiang/01220759-P4/2022	Cattle	97.26	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	97.25	0	O	ME-SA	Ind-2001	e
297259	ISA/Toraja_Utara/A07220106/2022		97.19	0	O	ME-SA	Ind-2001	e
659078	ISA/Bojonegoro/PVT/Pls-14/2023	Cattle	97.18	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.47	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.78	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		91.17	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.54	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.73	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	89.08	0	O	ME-SA	PanAsia-2	PUN-16
212	AFG/30/2010		88.82	0	O	ME-SA	PanAsia-2	KHO-10
8590	IRN/31/2009	Cattle	88.63	0	O	ME-SA	PanAsia-2	FAR-09
14504	SRL/2/97	Bovine	88.63	0	O	ME-SA	Srl-97	None
8875	IRN/8/2005	Sheep	88.50	0	O	ME-SA	PanAsia-2	None

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

Virus sample: ISA/6/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	40. ISA/Tanah Datar/A01250002-4/2025
Location of origin:	Batipuh Baruah/Batipuh, Tanah Datar, Sumatera Barat, Sumatera
Country of origin:	Indonesia
Date of collection:	2025-01-03
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297236	ISA/DeliSerdang/A01220762/2022	Cattle	97.56	0	O	ME-SA	Ind-2001	e
297235	ISA/Langkat/A01220761/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		97.37	0	O	ME-SA	Ind-2001	e
297251	ISA/Klaten/A04222596/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297243	ISA/Boyolali/A04222562/2022	Cattle	97.30	0	O	ME-SA	Ind-2001	e
297233	ISA/Tamiang/01220759-P4/2022	Cattle	97.26	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	97.25	0	O	ME-SA	Ind-2001	e
297259	ISA/Toraja_Utara/A07220106/2022		97.19	0	O	ME-SA	Ind-2001	e
659078	ISA/Bojonegoro/PVT/Pls-14/2023	Cattle	97.18	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	97.16	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.47	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.78	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		91.17	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.54	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.73	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	89.08	0	O	ME-SA	PanAsia-2	PUN-16
212	AFG/30/2010		88.82	0	O	ME-SA	PanAsia-2	KHO-10
8590	IRN/31/2009	Cattle	88.63	0	O	ME-SA	PanAsia-2	FAR-09
14504	SRL/2/97	Bovine	88.63	0	O	ME-SA	Srl-97	None
8875	IRN/8/2005	Sheep	88.50	0	O	ME-SA	PanAsia-2	None

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

Virus sample: ISA/7/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	30. ISA/Gunungkidul/AR340101250010-GK1-3/2025
Location of origin:	Pampang/Paliyan, Gunungkidul, Special Region of Yogyakarta, Java
Country of origin:	Indonesia
Date of collection:	2025-01-06
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-17
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.37	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.22	0	O	ME-SA	Ind-2001	e
659072	ISA/5/2023	Cattle	96.21	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	96.21	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	96.21	0	O	ME-SA	Ind-2001	e
659077	ISA/Nganjuk/PVT/Sw-1/2023	Cattle	96.16	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	96.16	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	96.12	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	96.08	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	96.05	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.84	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.52	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.06	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.89	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.45	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.33	0	O	ME-SA	Srl-97	None
14798	SYR/18/62		88.01	0	O	WCSA-1	Syr-62	None
10481	LAO/2/2006	Cattle	87.99	0	O	ME-SA	PanAsia	None
12855	PAK/7/2016	Cattle	87.50	0	O	ME-SA	PanAsia-2	PUN-16
8912	IRN/88/2009		87.38	0	O	ME-SA	PanAsia-2	ANT-10

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

Virus sample: ISA/8/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	26. ISA/Ponorogo/AR340101250018-POS22/2025
Location of origin:	Mrican/Jenangan, Ponorogo, Java Timur, Java
Country of origin:	Indonesia
Date of collection:	2025-01-09
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-17
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.84	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.72	0	O	ME-SA	Ind-2001	e
659072	ISA/5/2023	Cattle	96.68	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
659077	ISA/Nganjuk/PVT/Sw-1/2023	Cattle	96.64	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	96.64	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	96.60	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	96.57	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	96.52	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.31	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.00	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.38	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.20	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.92	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.80	0	O	ME-SA	Srl-97	None
14798	SYR/18/62		88.33	0	O	WCSA-1	Syr-62	None
10481	LAO/2/2006	Cattle	88.31	0	O	ME-SA	PanAsia	None
12855	PAK/7/2016	Cattle	87.97	0	O	ME-SA	PanAsia-2	PUN-16
212	AFG/30/2010		87.86	0	O	ME-SA	PanAsia-2	KHO-10

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

Virus sample: ISA/10/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	22. ISA/Klaten/PR340101250105-P. Karangnongko/2025
Location of origin:	Logede/Karangnongko, Klaten, Java Tengah, Java
Country of origin:	Indonesia
Date of collection:	2025-01-10
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659072	ISA/5/2023	Cattle	96.68	0	O	ME-SA	Ind-2001	e
659077	ISA/Nganjuk/PVT/Sw-1/2023	Cattle	96.64	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	96.64	0	O	ME-SA	Ind-2001	e
659071	ISA/4/2023	Cattle	96.52	0	O	ME-SA	Ind-2001	e
659073	ISA/6/2023	Cattle	96.52	0	O	ME-SA	Ind-2001	e
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
659078	ISA/Bojonegoro/PVT/Pls-14/2023	Cattle	96.52	0	O	ME-SA	Ind-2001	e
659076	ISA/Nganjuk/PVT/Pls-5/2023	Cattle	96.46	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.39	0	O	ME-SA	Ind-2001	e
659079	ISA/Bojonegoro/PVT/Pls-2/2023	Cattle	96.37	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.31	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.00	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.69	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.52	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.08	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.49	0	O	ME-SA	Srl-97	None
10481	LAO/2/2006	Cattle	88.31	0	O	ME-SA	PanAsia	None
14798	SYR/18/62		88.17	0	O	WCSA-1	Syr-62	None
12855	PAK/7/2016	Cattle	87.97	0	O	ME-SA	PanAsia-2	PUN-16
17602	UKG/35/2001		87.68	0	O	ME-SA	PanAsia	None

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

Virus sample: ISA/11/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	23. ISA/Boyolali/AR340101250034-BYL3,4/2025
Location of origin:	Wonoharjo/Kemusu, Boyolali, Java Tengah, Java
Country of origin:	Indonesia
Date of collection:	2025-01-20
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-24
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.55	0	O	ME-SA	Ind-2001	e
659072	ISA/5/2023	Cattle	96.52	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	96.52	0	O	ME-SA	Ind-2001	e
659077	ISA/Nganjuk/PVT/Sw-1/2023	Cattle	96.48	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	96.48	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	96.44	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	96.40	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	96.37	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.16	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.84	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.22	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.05	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.77	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.64	0	O	ME-SA	Srl-97	None
14798	SYR/18/62		88.17	0	O	WCSA-1	Syr-62	None
10481	LAO/2/2006	Cattle	88.15	0	O	ME-SA	PanAsia	None
12855	PAK/7/2016	Cattle	87.82	0	O	ME-SA	PanAsia-2	PUN-16
8912	IRN/88/2009		87.70	0	O	ME-SA	PanAsia-2	ANT-10

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

Virus sample: ISA/13/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	24. ISA/Wonogiri/AR340101250049-W4/2025
Location of origin:	Glesungrejo/Baturetno, Wonogiri, Java Tengah, Java
Country of origin:	Indonesia
Date of collection:	2025-01-24
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-03-24
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.84	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		96.72	0	O	ME-SA	Ind-2001	e
659072	ISA/5/2023	Cattle	96.68	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	96.68	0	O	ME-SA	Ind-2001	e
659077	ISA/Nganjuk/PVT/Sw-1/2023	Cattle	96.64	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	96.64	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	96.60	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	96.57	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	96.52	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.31	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.00	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.38	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.20	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.92	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.80	0	O	ME-SA	Srl-97	None
14798	SYR/18/62		88.33	0	O	WCSA-1	Syr-62	None
10481	LAO/2/2006	Cattle	88.31	0	O	ME-SA	PanAsia	None
12855	PAK/7/2016	Cattle	87.97	0	O	ME-SA	PanAsia-2	PUN-16
212	AFG/30/2010		87.86	0	O	ME-SA	PanAsia-2	KHO-10

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

Virus sample: ISA/17/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	32. ISA/Pangkajene dan Kepulauan/AR730801250026-9/2025
Location of origin:	Baring/Segeri, Pangkajene dan Kepulauan, Sulawesi Selatan, Sulawesi
Country of origin:	Indonesia
Date of collection:	2025-04-15
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-04-10
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297262	ISA/Gowa/A07220121/2022		98.10	0	O	ME-SA	Ind-2001	e
659068	ISA/8/2022	Cattle	98.10	0	O	ME-SA	Ind-2001	e
297260	ISA/Bantaeng/A07220112/2022		98.08	0	O	ME-SA	Ind-2001	e
297263	ISA/Luwu/A07220122/2022		98.08	0	O	ME-SA	Ind-2001	e
297259	ISA/Toraja_Utara/A07220106/2022		98.02	0	O	ME-SA	Ind-2001	e
297247	ISA/LTI/A06220466/2022	Cattle	97.95	0	O	ME-SA	Ind-2001	e
297261	ISA/Bone/A07220116/2022		97.95	0	O	ME-SA	Ind-2001	e
659067	ISA/7/2022	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659069	ISA/9/2022	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659070	ISA/2/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.31	0	O	ME-SA	Ind-2001	e
11999	OMN/7/2001		91.33	0	O	ME-SA	Ind-2001	b
3294	BHU/3/2009	Cattle	91.31	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		90.22	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.73	0	O	ME-SA	Ind-2001	c
12780	PAK/58/2012	Cattle	89.57	0	O	ME-SA	PanAsia-2	ICT-12
14504	SRL/2/97	Bovine	89.57	0	O	ME-SA	Srl-97	None
8590	IRN/31/2009	Cattle	89.12	0	O	ME-SA	PanAsia-2	FAR-09
12855	PAK/7/2016	Cattle	89.12	0	O	ME-SA	PanAsia-2	PUN-16
8912	IRN/88/2009		88.98	0	O	ME-SA	PanAsia-2	ANT-10

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

Virus sample: ISA/18/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	33. ISA/Pangkajene dan Kepulauan/AR730801250026-4/2025
Location of origin:	Tamarupa/Mandalle, Pangkajene dan Kepulauan, Sulawesi Selatan, Sulawesi
Country of origin:	Indonesia
Date of collection:	2025-04-15
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-04-10
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297262	ISA/Gowa/A07220121/2022		97.63	0	O	ME-SA	Ind-2001	e
659068	ISA/8/2022	Cattle	97.63	0	O	ME-SA	Ind-2001	e
659075	ISA/14/2023	Cattle	97.63	0	O	ME-SA	Ind-2001	e
297260	ISA/Bantaeng/A07220112/2022		97.60	0	O	ME-SA	Ind-2001	e
297263	ISA/Luwu/A07220122/2022		97.60	0	O	ME-SA	Ind-2001	e
297259	ISA/Toraja_Utara/A07220106/2022		97.53	0	O	ME-SA	Ind-2001	e
297247	ISA/LTI/A06220466/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297261	ISA/Bone/A07220116/2022		97.47	0	O	ME-SA	Ind-2001	e
659067	ISA/7/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
659069	ISA/9/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.47	0	O	ME-SA	Ind-2001	e
11999	OMN/7/2001		91.48	0	O	ME-SA	Ind-2001	b
3294	BHU/3/2009	Cattle	91.15	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		90.38	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.89	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	89.73	0	O	ME-SA	Srl-97	None
12780	PAK/58/2012	Cattle	89.10	0	O	ME-SA	PanAsia-2	ICT-12
12855	PAK/7/2016	Cattle	88.92	0	O	ME-SA	PanAsia-2	PUN-16
10481	LAO/2/2006	Cattle	88.78	0	O	ME-SA	PanAsia	None
8590	IRN/31/2009	Cattle	88.64	0	O	ME-SA	PanAsia-2	FAR-09

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

Virus sample: ISA/25/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	34. ISA/Tojo Una Una/AR730801250080-11/2025
Location of origin:	Tanimpo/Una-Una, Tojo Una Una, Sulawesi Tengah, Sulawesi
Country of origin:	Indonesia
Date of collection:	2025-06-16
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK2
Material Harvest Date:	2026-04-15
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297262	ISA/Gowa/A07220121/2022		97.63	0	O	ME-SA	Ind-2001	e
659068	ISA/8/2022	Cattle	97.63	0	O	ME-SA	Ind-2001	e
297260	ISA/Bantaeng/A07220112/2022		97.60	0	O	ME-SA	Ind-2001	e
297263	ISA/Luwu/A07220122/2022		97.60	0	O	ME-SA	Ind-2001	e
297259	ISA/Toraja_Utara/A07220106/2022		97.53	0	O	ME-SA	Ind-2001	e
297246	ISA/LTE/A06220465/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297247	ISA/LTI/A06220466/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297251	ISA/Klaten/A04222596/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
297261	ISA/Bone/A07220116/2022		97.47	0	O	ME-SA	Ind-2001	e
659067	ISA/7/2022	Cattle	97.47	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.63	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.63	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		91.48	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.38	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	89.73	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	89.42	0	O	ME-SA	Srl-97	None
12780	PAK/58/2012	Cattle	89.10	0	O	ME-SA	PanAsia-2	ICT-12
12855	PAK/7/2016	Cattle	88.92	0	O	ME-SA	PanAsia-2	PUN-16
8590	IRN/31/2009	Cattle	88.64	0	O	ME-SA	PanAsia-2	FAR-09
10481	LAO/2/2006	Cattle	88.63	0	O	ME-SA	PanAsia	None

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

Virus sample: ISA/26/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	35. ISA/Konawe Selatan/AR730801250098-14/2025
Location of origin:	Alebo/Konda, Konawe Selatan, Sulawesi Tenggara, Sulawesi
Country of origin:	Indonesia
Date of collection:	2025-07-14
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-04-10
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.04	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		95.89	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	95.89	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	95.89	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	95.79	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	95.75	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	95.73	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	95.73	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	95.73	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		95.73	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.51	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.19	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		89.90	0	O	ME-SA	Ind-2001	a
11999	OMN/7/2001		89.89	0	O	ME-SA	Ind-2001	b
14504	SRL/2/97	Bovine	88.33	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	88.17	0	O	ME-SA	Ind-2001	c
10481	LAO/2/2006	Cattle	87.97	0	O	ME-SA	PanAsia	None
14798	SYR/18/62		87.86	0	O	WCSA-1	Syr-62	None
12855	PAK/7/2016	Cattle	87.70	0	O	ME-SA	PanAsia-2	PUN-16
15944	Manisa/TUR/69_(O1)		87.50	0	O	ME-SA	None	None

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

Virus sample: ISA/27/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	36. ISA/Konawe Selatan/AR730801250098-15/2025
Location of origin:	Alebo/Konda, Konawe Selatan, Sulawesi Tenggara, Sulawesi
Country of origin:	Indonesia
Date of collection:	2025-07-14
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-04-10
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
856002	ISA/MHW32-POcattle/2022	Peranakan Ongole	96.04	0	O	ME-SA	Ind-2001	e
297264	ISA/Karanganyar/A04223309/2022		95.89	0	O	ME-SA	Ind-2001	e
856003	ISA/MHW84-POcattle/2022	Peranakan Ongole	95.89	0	O	ME-SA	Ind-2001	e
856004	ISA/MHW87-POcattle/2022	Peranakan Ongole	95.89	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	95.79	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	95.75	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	95.73	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	95.73	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	95.73	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		95.73	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.51	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	90.19	0	O	ME-SA	Ind-2001	d
10350	KUW/3/97		89.90	0	O	ME-SA	Ind-2001	a
11999	OMN/7/2001		89.89	0	O	ME-SA	Ind-2001	b
14504	SRL/2/97	Bovine	88.33	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	88.17	0	O	ME-SA	Ind-2001	c
10481	LAO/2/2006	Cattle	87.97	0	O	ME-SA	PanAsia	None
14798	SYR/18/62		87.86	0	O	WCSA-1	Syr-62	None
12855	PAK/7/2016	Cattle	87.70	0	O	ME-SA	PanAsia-2	PUN-16
15944	Manisa/TUR/69_(O1)		87.50	0	O	ME-SA	None	None

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

Virus sample: ISA/31/2025

Sample details

Reception Date:	2026-02-05
Sender reference:	42. ISA/Sumbawa Barat/AR517101251429/2025
Location of origin:	Loka/Seteluk, Sumbawa Barat, Nusa Tenggara Barat, West Tenggara Barat
Country of origin:	Indonesia
Date of collection:	2025-09-24
Host species:	cattle

Genotyping details

Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

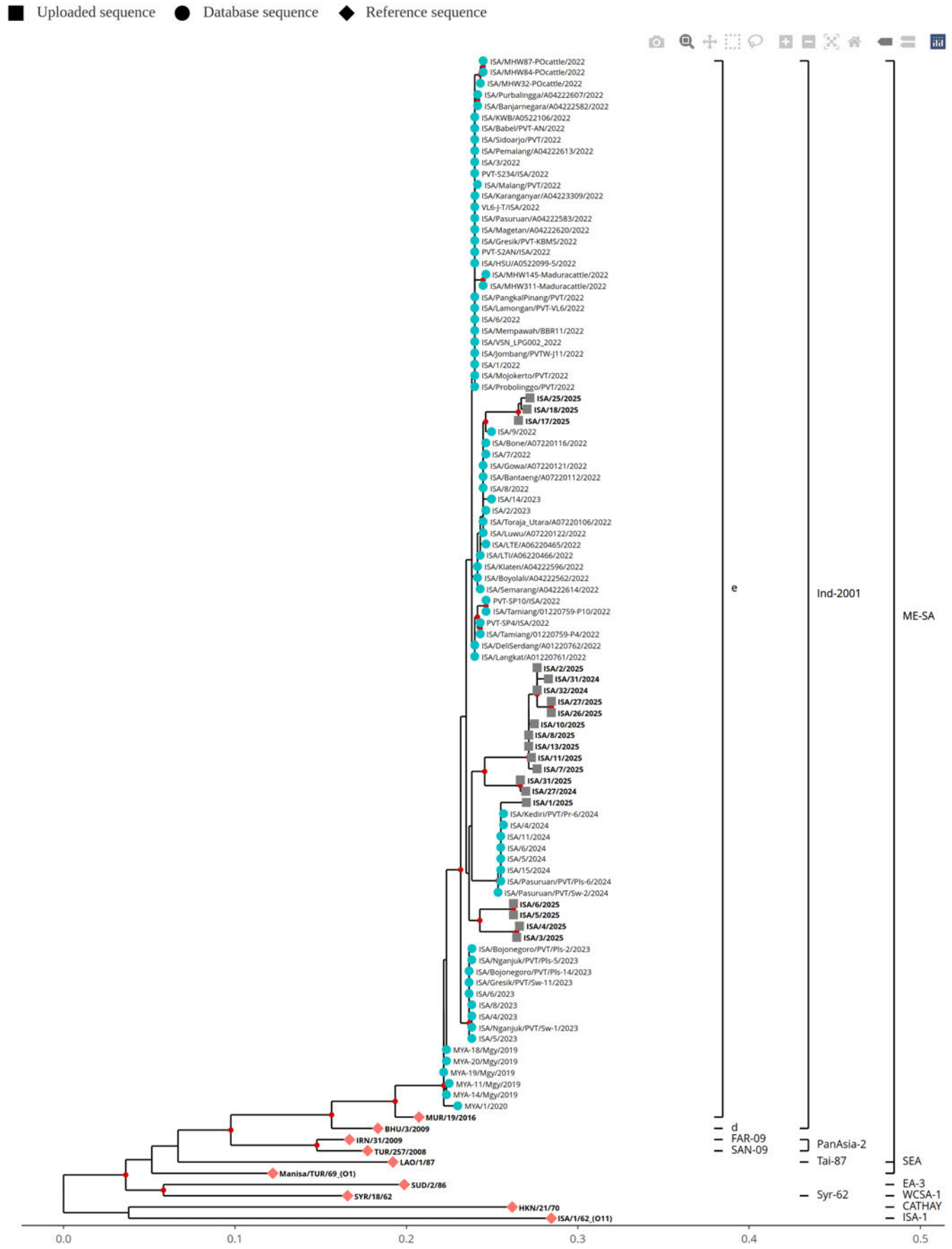
Material submitted for sequencing:	WRL-LFBK2
Material Harvest Date:	2026-04-11
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
297264	ISA/Karanganyar/A04223309/2022		97.54	0	O	ME-SA	Ind-2001	e
297255	ISA/Pemalang/A04222613/2022	Cattle	97.46	0	O	ME-SA	Ind-2001	e
659080	ISA/Gresik/PVT/Sw-11/2023	Cattle	97.45	0	O	ME-SA	Ind-2001	e
297245	ISA/PangkalPinang/PVT/2022	Cattle	97.41	0	O	ME-SA	Ind-2001	e
297250	ISA/Banjarnegara/A04222582/2022	Cattle	97.39	0	O	ME-SA	Ind-2001	e
659078	ISA/Bojonegoro/PVT/Pls-14/2023	Cattle	97.35	0	O	ME-SA	Ind-2001	e
297225	ISA/1/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297226	ISA/3/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297227	ISA/6/2022	Cattle	97.31	0	O	ME-SA	Ind-2001	e
297228	VL6-J-T/ISA/2022		97.31	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	94.79	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.94	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.85	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		90.54	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	90.11	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	89.73	0	O	ME-SA	Srl-97	None
12780	PAK/58/2012	Cattle	88.98	0	O	ME-SA	PanAsia-2	ICT-12
12855	PAK/7/2016	Cattle	88.98	0	O	ME-SA	PanAsia-2	PUN-16
17602	UKG/35/2001		88.80	0	O	ME-SA	PanAsia	None
10481	LAO/2/2006	Cattle	88.63	0	O	ME-SA	PanAsia	None

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

Tree


Uploaded sequence
Database sequence
Reference sequence
ISA/MHW87-POcattle/2022
ISA/MHW84-POcattle/2022
ISA/MHW32-POcattle/2022
ISA/Purbalingga/A04222607/2022
ISA/Banjarnegara/A04222582/2022
ISA/KWB/A0522106/2022
ISA/Babel/PVT-AN/2022
ISA/Sidoarjo/PVT/2022
ISA/Pemalang/A04222613/2022
ISA/3/2022
PVT-S234/ISA/2022
ISA/Malang/PVT/2022
ISA/Karanganyar/A04223309/2022
VL6-J-T/ISA/2022
ISA/Pasuruan/A04222583/2022
ISA/Magetan/A04222620/2022
ISA/Gresik/PVT-KBMS/2022
PVT-S2AN/ISA/2022
ISA/HSU/A0522099-5/2022
ISA/MHW145-Maduracattle/2022
ISA/MHW311-Maduracattle/2022
ISA/PangkalPinang/PVT/2022
ISA/Lamongan/PVT-VL6/2022
ISA/6/2022
ISA/Mempawah/BBR11/2022
ISA/VSN_LPG002_2022
ISA/Jombang/PVTW-J11/2022
ISA/1/2022
ISA/Mojokerto/PVT/2022
ISA/Probolinggo/PVT/2022
ISA/25/2025
ISA/18/2025
ISA/17/2025
ISA/9/2022
ISA/Bone/A07220116/2022
ISA/7/2022
ISA/Gowa/A07220121/2022
ISA/Bantaeng/A07220112/2022
ISA/8/2022
ISA/14/2023
ISA/2/2023
ISA/Toraja_Utara/A07220106/2022
ISA/Luwu/A07220122/2022
ISA/LTE/A06220465/2022
ISA/LTI/A06220466/2022
ISA/Klaten/A04222596/2022
ISA/Boyolali/A04222562/2022
ISA/Semarang/A04222614/2022
PVT-SP10/ISA/2022
ISA/Tamiang/01220759-P10/2022
PVT-SP4/ISA/2022
ISA/Tamiang/01220759-P4/2022
ISA/DeliSerdang/A01220762/2022
ISA/Langkat/A01220761/2022
ISA/2/2025
ISA/31/2024
ISA/32/2024
ISA/27/2025
ISA/26/2025
ISA/10/2025
ISA/8/2025
ISA/13/2025
ISA/11/2025
ISA/7/2025
ISA/31/2025
ISA/27/2024
ISA/1/2025
ISA/Kediri/PVT/Pr-6/2024
ISA/4/2024
ISA/11/2024
ISA/6/2024
ISA/5/2024
ISA/15/2024
ISA/Pasuruan/PVT/Pls-6/2024
ISA/Pasuruan/PVT/Sw-2/2024
ISA/6/2025
ISA/5/2025
ISA/4/2025
ISA/3/2025
ISA/Bojonegoro/PVT/Pls-2/2023
ISA/Nganjuk/PVT/Pls-5/2023
ISA/Bojonegoro/PVT/Pls-14/2023
ISA/Gresik/PVT/Sw-11/2023
ISA/6/2023
ISA/8/2023
ISA/4/2023
ISA/Nganjuk/PVT/Sw-1/2023
ISA/5/2023
MYA-18/Mgy/2019
MYA-20/Mgy/2019
MYA-19/Mgy/2019
MYA-11/Mgy/2019
MYA-14/Mgy/2019
MYA/1/2020
MUR/19/2016
BHU/3/2009
IRN/31/2009
TUR/257/2008
LAO/1/87
Manisa/TUR/69_(O1)
SUD/2/86
SYR/18/62
HKN/21/70
ISA/1/62_(O11)
e
d
FAR-09
SAN-09
Ind-2001
PanAsia-2
Tai-87
Syr-62
ME-SA
SEA
EA-3
WCSA-1
CATHAY
ISA-1
0.0
0.1
0.2
0.3
0.4
0.5

Analysis Parameters

Query sequence set: WRLFMD/2026/000005
Number of related sequences reported: 74
Number of prototype sequences in tree: 10
Minimal VP1 subsequence match length: 610
Sequence alignment length: 635

Number of sequences in tree capped at: 100
Sequence alignment method: MAFFT 7.522
Phylogeny reconstruction method: IQ-TREE 2.26
Number of bootstrap samples: 1000
Displaying bootstrap values above: 75

FMDV VP1 Sequences included in the Phylogenetic Tree

Sequence Name	GenBank Accession	Host	Ref Lab	Country	FMDV Taxonomy	Pubmed Reference Number
MYA-14/Mgy/2019 *	LC603299	Cattle	NIAH-JAPAN	Myanmar	O/ME-SA/Ind-2001/e	41200503
MYA-18/Mgy/2019 *	LC603300	Cattle	NIAH-JAPAN	Myanmar	O/ME-SA/Ind-2001/e	41200503
MYA-19/Mgy/2019 *	LC603301	Cattle	NIAH-JAPAN	Myanmar	O/ME-SA/Ind-2001/e	41200503
MYA-11/Mgy/2019 *	LC604883	Cattle	NIAH-JAPAN	Myanmar	O/ME-SA/Ind-2001/e	41200503
MYA-20/Mgy/2019 *	LC604888	Cattle	NIAH-JAPAN	Myanmar	O/ME-SA/Ind-2001/e	41200503
MYA/1/2020 *	LC815045	Cattle	NIAH-JAPAN	Myanmar	O/ME-SA/Ind-2001/e	41200503
ISA/1/2022	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/3/2022	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/6/2022	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
VL6-J-T/ISA/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
PVT-SP4/ISA/2022 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
PVT-SP10/ISA/2022 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
PVT-S2AN/ISA/2022 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
PVT-S234/ISA/2022 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Tamiang/01220759-P4/2022 *	ON783873	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Tamiang/01220759-P10/2022 *	ON783874	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Langkat/A01220761/2022 *	ON854934	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/DeliSerdang/A01220762/2022 *	ON854935	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Lamongan/PVT-VL6/2022 *	ON854936	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Sidoarjo/PVT/2022 *	ON854937	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Mojokerto/PVT/2022 *	ON854938	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Babel/PVT-AN/2022 *	ON854939	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Probolinggo/PVT/2022 *	ON854940	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Malang/PVT/2022 *	ON854941	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Boyolali/A04222562/2022 *	ON854942	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Pasuruan/A04222583/2022 *	ON854943	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/PangkalPinang/PVT/2022 *	ON854944	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/LTE/A06220465/2022 *	ON854945	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/LTI/A06220466/2022 *	ON854946	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Mempawah/BBR11/2022 *	ON854947	Goat	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/KWB/A0522106/2022 *	ON854948	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Banjarnegara/A04222582/2022 *	ON854949	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Klaten/A04222596/2022 *	ON854950	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Jombang/PVTW-J11/2022 *	ON854951	Goat	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Gresik/PVT-KBMS/2022 *	ON854952	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Purbalingga/A04222607/2022 *	ON854953	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Pemalang/A04222613/2022 *	ON854954	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Semarang/A04222614/2022 *	ON854955	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Magetan/A04222620/2022 *	ON854956	Cattle	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/HSU/A0522099-5/2022 *	ON854957	Goat	DICWY	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Toraja_Utara/A07220106/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Bantaeng/A07220112/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Bone/A07220116/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Gowa/A07220121/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Luwu/A07220122/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Karanganyar/A04223309/2022 *	None		PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/7/2022	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/8/2022	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/9/2022	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/2/2023	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/4/2023	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/5/2023	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/6/2023	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/8/2023	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/14/2023	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Nganjuk/PVT/Pls-5/2023 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Nganjuk/PVT/Sw-1/2023 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Bojonegoro/PVT/Pls-14/2023 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Bojonegoro/PVT/Pls-2/2023 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Gresik/PVT/Sw-11/2023 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/4/2024	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/5/2024	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None

FMDV VP1 Sequences included in the Phylogenetic Tree *(continued)*

Sequence Name	GenBank Accession	Host	Ref Lab	Country	FMDV Taxonomy	Pubmed Reference Number
ISA/6/2024	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/11/2024	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/15/2024	None	Cattle	WRLFMD	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Kediri/PVT/Pr-6/2024 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Pasuruan/PVT/Pls-6/2024 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/Pasuruan/PVT/Sw-2/2024 *	None	Cattle	PUSVETMA	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/VSN_LPG002_2022 *	OP751924	Cattle	VAKSINDO-SN	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/MHW32-POcattle/2022 *	OR570805	Peranakan Ongole	UGM	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/MHW84-POcattle/2022 *	OR570806	Peranakan Ongole	UGM	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/MHW87-POcattle/2022 *	OR570807	Peranakan Ongole	UGM	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/MHW145-Maduracattle/2022 *	OR570808	Madura	UGM	Indonesia	O/ME-SA/Ind-2001/e	None
ISA/MHW311-Maduracattle/2022 *	OR570809	Madura	UGM	Indonesia	O/ME-SA/Ind-2001/e	None

* Not a WRLFMD Reference Number;
Not Available