



## FMD Genotyping Report

Lab Reference WRL batch Number: WRLFMD/2025/000017

Sender Details:



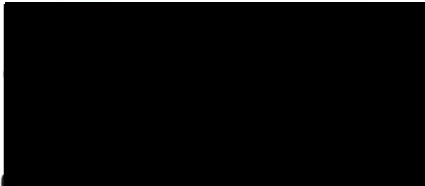
Date Received: 7/11/2025

Country of Origin\*: Kenya

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

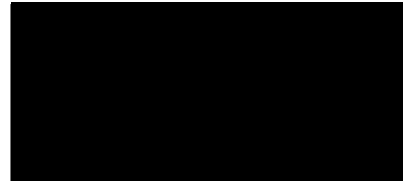
Please note that all our phylogenetic trees can be accessed via the internet at: <http://www.wrlfmd.org/>

Results Approved By:



Date: 20/1/2026

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



WOAH/FAO  
Foot-and-Mouth Disease  
Reference Laboratories  
Network



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

## FMDV Genotyping Report

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Generated from: **FMDtype** | FMDV Genotyping Tool

Downloaded on: 16 January 2026

Citation: WRLFMD. 2026. FMDV Genotyping Report [WRLFMD/2025/000017]. (Accessed 16/01/26)

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**FMDV serotype:** O

**Country:** Kenya

**Year:** 2023-2025

**Batch:** WRLFMD/2025/000017

**No. of sequences:** 15

**Reported date:** 16 January 2026

**WRLFMD Website:** <https://www.wrlfmd.org/>

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

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FMDtype is supported through funding from



# Virus sample: KEN/9/2023

## Sample details

Reception Date:	2025-11-07
Sender reference:	K36/23
Location of origin:	Angarom, Busia
Country of origin:	Kenya
Date of collection:	2023-08-17
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-19
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659142	UGA/27/2023	Bovine	99.53	0	O	EA-2	None	None
659143	UGA/30/2023	Bovine	99.21	0	O	EA-2	None	None
659159	UGA13/2024	Bovine	98.74	0	O	EA-2	None	None
297313	KEN/8/2020	Cattle	97.00	0	O	EA-2	None	None
297309	KEN/2/2020	Cattle	96.68	0	O	EA-2	None	None
485070	K68/2020	Bovine	96.68	0	O	EA-2	None	None
485069	K29/2020	Bovine	96.52	0	O	EA-2	None	None
485068	K31/2020	Bovine	96.21	0	O	EA-2	None	None
485067	K14/2020	Bovine	95.89	0	O	EA-2	None	None
297311	KEN/6/2020	Cattle	95.58	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.26	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	88.31	0	O	EA-2	None	None
10699	MAL/1/98		87.99	0	O	EA-2	None	None
17205	UGA/3/2002		87.87	1	O	EA-2	None	None
14466	SRL/1/78		84.91	0	O	WCSA-1	Srl-77	None
9823	K83/79		84.91	0	O	EA-1	None	None
7280	IND/53/79	Bovine	84.72	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	84.52	0	O	ME-SA	PanAsia	None
14504	SRL/2/97	Bovine	84.36	0	O	ME-SA	Srl-97	None
14697	SUD/2/86	Cattle	84.25	0	O	EA-3	None	None

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

# Virus sample: KEN/1/2024

## Sample details

Reception Date:	2025-11-07
Sender reference:	K2/24
Location of origin:	Entebes, Trans Nzoia
Country of origin:	Kenya
Date of collection:	2024-01-15
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-12-02
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659159	UGA13/2024	Bovine	99.68	0	O	EA-2	None	None
659142	UGA/27/2023	Bovine	98.58	0	O	EA-2	None	None
659143	UGA/30/2023	Bovine	98.26	0	O	EA-2	None	None
297313	KEN/8/2020	Cattle	97.00	0	O	EA-2	None	None
297309	KEN/2/2020	Cattle	96.68	0	O	EA-2	None	None
485070	K68/2020	Bovine	96.68	0	O	EA-2	None	None
485069	K29/2020	Bovine	96.52	0	O	EA-2	None	None
485068	K31/2020	Bovine	96.21	0	O	EA-2	None	None
485067	K14/2020	Bovine	95.89	0	O	EA-2	None	None
297311	KEN/6/2020	Cattle	95.58	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.89	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	89.26	0	O	EA-2	None	None
10699	MAL/1/98		88.94	0	O	EA-2	None	None
17205	UGA/3/2002		88.63	1	O	EA-2	None	None
9823	K83/79		85.67	0	O	EA-1	None	None
14466	SRL/1/78		85.55	0	O	WCSA-1	Srl-77	None
14697	SUD/2/86	Cattle	85.02	0	O	EA-3	None	None
10481	LAO/2/2006	Cattle	84.83	0	O	ME-SA	PanAsia	None
15944	Manisa/TUR/69_(O1)		84.57	0	O	ME-SA	None	None
17330	UAE/4/2008	Gazelle	84.36	0	O	ME-SA	Ind-2001	c

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

# Virus sample: KEN/6/2024

## Sample details

Reception Date:	2025-11-07
Sender reference:	K19/24
Location of origin:	Kathonzweni, Makueni
Country of origin:	Kenya
Date of collection:	2024-04-12
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK2
Material Harvest Date:	2025-11-25
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
297320	KEN/6/2021	Cattle	97.31	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	97.31	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	97.16	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	97.00	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.68	0	O	EA-2	None	None
659100	KEN/2/2023	Cattle	96.52	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	96.37	0	O	EA-2	None	None
659099	KEN/1/2023	Cattle	95.74	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.42	0	O	EA-2	None	None
15339	TAN-SUA-2017-0652	Cattle	95.26	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.89	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	89.42	0	O	EA-2	None	None
17205	UGA/3/2002		88.47	1	O	EA-2	None	None
10699	MAL/1/98		88.31	0	O	EA-2	None	None
9747	K40/84	Cattle	84.68	0	O	EA-1	None	None
14697	SUD/2/86	Cattle	84.68	0	O	EA-3	None	None
3294	BHU/3/2009	Cattle	84.18	0	O	ME-SA	Ind-2001	d
9823	K83/79		83.94	0	O	EA-1	None	None
14465	SRL/1/2019	Cattle	83.75	0	O	ME-SA	SA-2018	None
17330	UAE/4/2008	Gazelle	83.57	0	O	ME-SA	Ind-2001	c

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

# Virus sample: KEN/10/2024

## Sample details

Reception Date:	2025-11-07
Sender reference:	K29/24
Location of origin:	Narok east, Narok
Country of origin:	Kenya
Date of collection:	2024-05-27
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-22
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659099	KEN/1/2023	Cattle	97.79	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	97.47	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	97.47	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	97.31	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	97.16	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.84	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	96.21	0	O	EA-2	None	None
659100	KEN/2/2023	Cattle	96.05	0	O	EA-2	None	None
1049118	BAR/47/2025	Cattle	95.89	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.74	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	93.84	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	89.10	0	O	EA-2	None	None
17205	UGA/3/2002		88.63	1	O	EA-2	None	None
10699	MAL/1/98		88.31	0	O	EA-2	None	None
9747	K40/84	Cattle	84.68	0	O	EA-1	None	None
10350	KUW/3/97		84.14	0	O	ME-SA	Ind-2001	a
14798	SYR/18/62		83.73	0	O	WCSA-1	Syr-62	None
3294	BHU/3/2009	Cattle	83.62	0	O	ME-SA	Ind-2001	d
9823	K83/79		83.62	0	O	EA-1	None	None
14504	SRL/2/97	Bovine	83.41	0	O	ME-SA	Srl-97	None

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

# Virus sample: KEN/15/2024

## Sample details

Reception Date:	2025-11-07
Sender reference:	K65/24
Location of origin:	Githunguri, Kiambu
Country of origin:	Kenya
Date of collection:	2024-08-23
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-12-01
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
297320	KEN/6/2021	Cattle	97.16	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	97.16	0	O	EA-2	None	None
659099	KEN/1/2023	Cattle	97.16	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	97.00	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.84	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.52	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.89	0	O	EA-2	None	None
659100	KEN/2/2023	Cattle	95.74	0	O	EA-2	None	None
1049118	BAR/47/2025	Cattle	95.58	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.42	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	93.21	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	88.78	0	O	EA-2	None	None
10699	MAL/1/98		87.99	0	O	EA-2	None	None
17205	UGA/3/2002		87.99	1	O	EA-2	None	None
9747	K40/84	Cattle	84.36	0	O	EA-1	None	None
10350	KUW/3/97		83.97	0	O	ME-SA	Ind-2001	a
9823	K83/79		83.78	0	O	EA-1	None	None
14798	SYR/18/62		83.41	0	O	WCSA-1	Syr-62	None
3294	BHU/3/2009	Cattle	83.31	0	O	ME-SA	Ind-2001	d
14504	SRL/2/97	Bovine	83.10	0	O	ME-SA	Srl-97	None

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

# Virus sample: KEN/2/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K7/25
Location of origin:	Kagaa, Muranga
Country of origin:	Kenya
Date of collection:	2025-01-22
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-12-01
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659099	KEN/1/2023	Cattle	97.31	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	97.00	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	97.00	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.84	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.68	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.37	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.42	0	O	EA-2	None	None
1049118	BAR/47/2025	Cattle	95.42	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.26	0	O	EA-2	None	None
15347	TAN-SUA-2017-0742	Cattle	95.26	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.73	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	87.99	0	O	EA-2	None	None
14466	SRL/1/78		84.04	0	O	WCSA-1	Srl-77	None
9823	K83/79		83.94	0	O	EA-1	None	None
14504	SRL/2/97	Bovine	83.84	0	O	ME-SA	Srl-97	None
11999	OMN/7/2001		83.49	0	O	ME-SA	Ind-2001	b
3982	BUR/2/77	Cattle	83.01	0	O	SEA	Bur-77	None
14697	SUD/2/86	Cattle	83.01	0	O	EA-3	None	None
4675	CIV/8/99		82.73	0	O	WA	None	None
15944	Manisa/TUR/69_(O1)		82.67	0	O	ME-SA	None	None

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

# Virus sample: KEN/13/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K28/25
Location of origin:	Chogoria, Tharakanithi
Country of origin:	Kenya
Date of collection:	2025-02-25
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-21
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659099	KEN/1/2023	Cattle	98.10	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	97.47	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	97.47	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	97.31	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	97.16	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.84	0	O	EA-2	None	None
1049118	BAR/47/2025	Cattle	96.52	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	96.21	0	O	EA-2	None	None
659100	KEN/2/2023	Cattle	96.05	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.74	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	93.05	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	88.15	0	O	EA-2	None	None
17205	UGA/3/2002		87.52	1	O	EA-2	None	None
9747	K40/84	Cattle	85.02	0	O	EA-1	None	None
9823	K83/79		84.72	0	O	EA-1	None	None
14798	SYR/18/62		84.54	0	O	WCSA-1	Syr-62	None
14697	SUD/2/86	Cattle	84.16	0	O	EA-3	None	None
14466	SRL/1/78		84.04	0	O	WCSA-1	Srl-77	None
3294	BHU/3/2009	Cattle	84.02	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		83.54	0	O	ME-SA	Ind-2001	b

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

# Virus sample: KEN/23/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K43/25
Location of origin:	Eldoret, Uasingishu
Country of origin:	Kenya
Date of collection:	2025-05-20
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-20
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
1049118	BAR/47/2025	Cattle	99.21	0	O	EA-2	None	None
659099	KEN/1/2023	Cattle	97.00	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	96.68	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	96.68	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.52	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.37	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.05	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.42	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.26	0	O	EA-2	None	None
15347	TAN-SUA-2017-0742	Cattle	95.26	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.58	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	87.68	0	O	EA-2	None	None
17205	UGA/3/2002		86.57	1	O	EA-2	None	None
14504	SRL/2/97	Bovine	84.20	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	84.20	0	O	ME-SA	Ind-2001	c
9823	K83/79		83.91	0	O	EA-1	None	None
14798	SYR/18/62		83.60	0	O	WCSA-1	Syr-62	None
8355	IRN/18/2010	Cattle	83.57	0	O	ME-SA	PanAsia-2	BAL-09
3294	BHU/3/2009	Cattle	83.54	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		83.23	0	O	ME-SA	Ind-2001	b

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

# Virus sample: KEN/39/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K57/25
Location of origin:	Muhoroni, Kisumu
Country of origin:	Kenya
Date of collection:	2025-06-12
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-19
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
1049118	BAR/47/2025	Cattle	99.21	0	O	EA-2	None	None
659099	KEN/1/2023	Cattle	97.00	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	96.68	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	96.68	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.52	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.37	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.05	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.42	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	95.26	0	O	EA-2	None	None
15347	TAN-SUA-2017-0742	Cattle	95.26	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.58	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	87.68	0	O	EA-2	None	None
17205	UGA/3/2002		86.57	1	O	EA-2	None	None
14504	SRL/2/97	Bovine	84.04	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	84.04	0	O	ME-SA	Ind-2001	c
9823	K83/79		83.75	0	O	EA-1	None	None
14798	SYR/18/62		83.44	0	O	WCSA-1	Syr-62	None
8355	IRN/18/2010	Cattle	83.41	0	O	ME-SA	PanAsia-2	BAL-09
3294	BHU/3/2009	Cattle	83.39	0	O	ME-SA	Ind-2001	d
16377	TUR/264/2009		83.09	0	O	ME-SA	PanAsia-2	SAN-09

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

# Virus sample: KEN/88/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K62/25
Location of origin:	Rosaga, Baringo
Country of origin:	Kenya
Date of collection:	2025-07-08
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-18
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659101	KEN/3/2023	Cattle	97.63	0	O	EA-2	None	None
659104	KEN/7/2023	Cattle	97.63	0	O	EA-2	None	None
659141	UGA/23/2023	Bovine	97.47	0	O	EA-2	None	None
659140	UGA/21/2023	Bovine	97.31	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	97.00	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	97.00	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.84	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.68	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.37	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.42	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.89	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	89.42	0	O	EA-2	None	None
17205	UGA/3/2002		87.99	1	O	EA-2	None	None
10699	MAL/1/98		87.68	0	O	EA-2	None	None
14466	SRL/1/78		84.11	0	O	WCSA-1	Sri-77	None
14798	SYR/18/62		83.89	0	O	WCSA-1	Syr-62	None
3294	BHU/3/2009	Cattle	83.78	0	O	ME-SA	Ind-2001	d
10481	LAO/2/2006	Cattle	83.73	0	O	ME-SA	PanAsia	None
9823	K83/79		83.62	0	O	EA-1	None	None
14465	SRL/1/2019	Cattle	83.60	0	O	ME-SA	SA-2018	None

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

# Virus sample: KEN/89/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K67/25
Location of origin:	Mochengo, Kisii
Country of origin:	Kenya
Date of collection:	2025-07-17
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-18
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659101	KEN/3/2023	Cattle	97.63	0	O	EA-2	None	None
659104	KEN/7/2023	Cattle	97.63	0	O	EA-2	None	None
659141	UGA/23/2023	Bovine	97.47	0	O	EA-2	None	None
659140	UGA/21/2023	Bovine	97.31	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	96.68	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	96.68	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.52	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.37	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.05	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.10	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.58	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	88.78	0	O	EA-2	None	None
17205	UGA/3/2002		87.99	1	O	EA-2	None	None
10699	MAL/1/98		87.36	0	O	EA-2	None	None
14466	SRL/1/78		84.11	0	O	WCSA-1	Sri-77	None
14798	SYR/18/62		83.89	0	O	WCSA-1	Syr-62	None
3294	BHU/3/2009	Cattle	83.78	0	O	ME-SA	Ind-2001	d
10481	LAO/2/2006	Cattle	83.73	0	O	ME-SA	PanAsia	None
9823	K83/79		83.62	0	O	EA-1	None	None
14465	SRL/1/2019	Cattle	83.60	0	O	ME-SA	SA-2018	None

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

# Virus sample: KEN/90/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K68/25
Location of origin:	Kabete, Kiambu
Country of origin:	Kenya
Date of collection:	2025-07-24
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-3
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-12-02
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
296902	ETH/4/2021	Bovine	97.00	0	O	EA-3	None	None
296903	ETH/5/2021	Bovine	97.00	0	O	EA-3	None	None
297629	OMN/22Z2054/2020_93	Cattle	96.68	0	O	EA-3	None	None
297630	OMN/22Z2055/2020_94	Cattle	96.68	0	O	EA-3	None	None
297624	OMN/22Z2083/2020_131	Cattle	96.52	0	O	EA-3	None	None
297625	OMN/22Z2078/2020_125	Cattle	96.52	0	O	EA-3	None	None
297626	OMN/22Z2079/2020_126	Cattle	96.52	0	O	EA-3	None	None
297627	OMN/22Z2080/2020_127	Cattle	96.52	0	O	EA-3	None	None
297628	OMN/22Z2081/2020_128	Cattle	96.52	0	O	EA-3	None	None
297631	OMN/22Z2057/2020_96	Cattle	96.52	0	O	EA-3	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
5422	ETH/1/2007	Cattle	90.36	0	O	EA-3	None	None
14697	SUD/2/86	Cattle	88.94	0	O	EA-3	None	None
5575	ETH/3/2004	Cattle	87.97	0	O	EA-3	None	None
10989	MUR/19/2016	Cattle	86.77	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	86.71	0	O	ME-SA	Ind-2001	d
10481	LAO/2/2006	Cattle	86.71	0	O	ME-SA	PanAsia	None
8875	IRN/8/2005	Sheep	86.35	0	O	ME-SA	PanAsia-2	None
9747	K40/84	Cattle	86.26	0	O	EA-1	None	None
17602	UKG/35/2001	Cattle	86.26	0	O	ME-SA	PanAsia	None
10350	KUW/3/97	Cattle	86.23	0	O	ME-SA	Ind-2001	a

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

# Virus sample: KEN/91/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K72/25
Location of origin:	Olkalou, Nyandarua
Country of origin:	Kenya
Date of collection:	2025-08-14
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-26
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
1049118	BAR/47/2025	Cattle	98.89	0	O	EA-2	None	None
659099	KEN/1/2023	Cattle	96.68	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	96.37	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	96.37	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.21	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.05	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.05	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.10	0	O	EA-2	None	None
15343	TAN-SUA-2017-0726	Cattle	94.94	0	O	EA-2	None	None
15347	TAN-SUA-2017-0742	Cattle	94.94	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.26	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	87.68	0	O	EA-2	None	None
17205	UGA/3/2002		86.89	1	O	EA-2	None	None
14504	SRL/2/97	Bovine	84.36	0	O	ME-SA	Srl-97	None
9823	K83/79		84.23	0	O	EA-1	None	None
17330	UAE/4/2008	Gazelle	84.04	0	O	ME-SA	Ind-2001	c
8355	IRN/18/2010	Cattle	83.73	0	O	ME-SA	PanAsia-2	BAL-09
3294	BHU/3/2009	Cattle	83.70	0	O	ME-SA	Ind-2001	d
14798	SYR/18/62		83.44	0	O	WCSA-1	Syr-62	None
9747	K40/84	Cattle	83.41	0	O	EA-1	None	None

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

# Virus sample: KEN/92/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K74/25
Location of origin:	Uasingishu
Country of origin:	Kenya
Date of collection:	2025-08-19
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-18
Sequence length:	636
Ambiguities:	0

## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659101	KEN/3/2023	Cattle	97.79	0	O	EA-2	None	None
659104	KEN/7/2023	Cattle	97.79	0	O	EA-2	None	None
659141	UGA/23/2023	Bovine	97.63	0	O	EA-2	None	None
659140	UGA/21/2023	Bovine	97.47	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	96.84	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	96.84	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.68	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.52	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.21	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.26	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.73	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	88.94	0	O	EA-2	None	None
17205	UGA/3/2002		88.15	1	O	EA-2	None	None
10699	MAL/1/98		87.52	0	O	EA-2	None	None
14466	SRL/1/78		84.27	0	O	WCSA-1	Sri-77	None
14798	SYR/18/62		84.04	0	O	WCSA-1	Syr-62	None
3294	BHU/3/2009	Cattle	83.94	0	O	ME-SA	Ind-2001	d
10481	LAO/2/2006	Cattle	83.89	0	O	ME-SA	PanAsia	None
9823	K83/79		83.78	0	O	EA-1	None	None
14465	SRL/1/2019	Cattle	83.75	0	O	ME-SA	SA-2018	None

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

# Virus sample: KEN/93/2025

## Sample details

Reception Date:	2025-11-07
Sender reference:	K77/25
Location of origin:	Githunguri, Kiambu
Country of origin:	Kenya
Date of collection:	2025-08-28
Host species:	bovine

## Genotyping details

Serotype:	O
Topotype:	EA-2
Lineage:	None
Sublineage:	None

## Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2025-11-26
Sequence length:	636
Ambiguities:	0

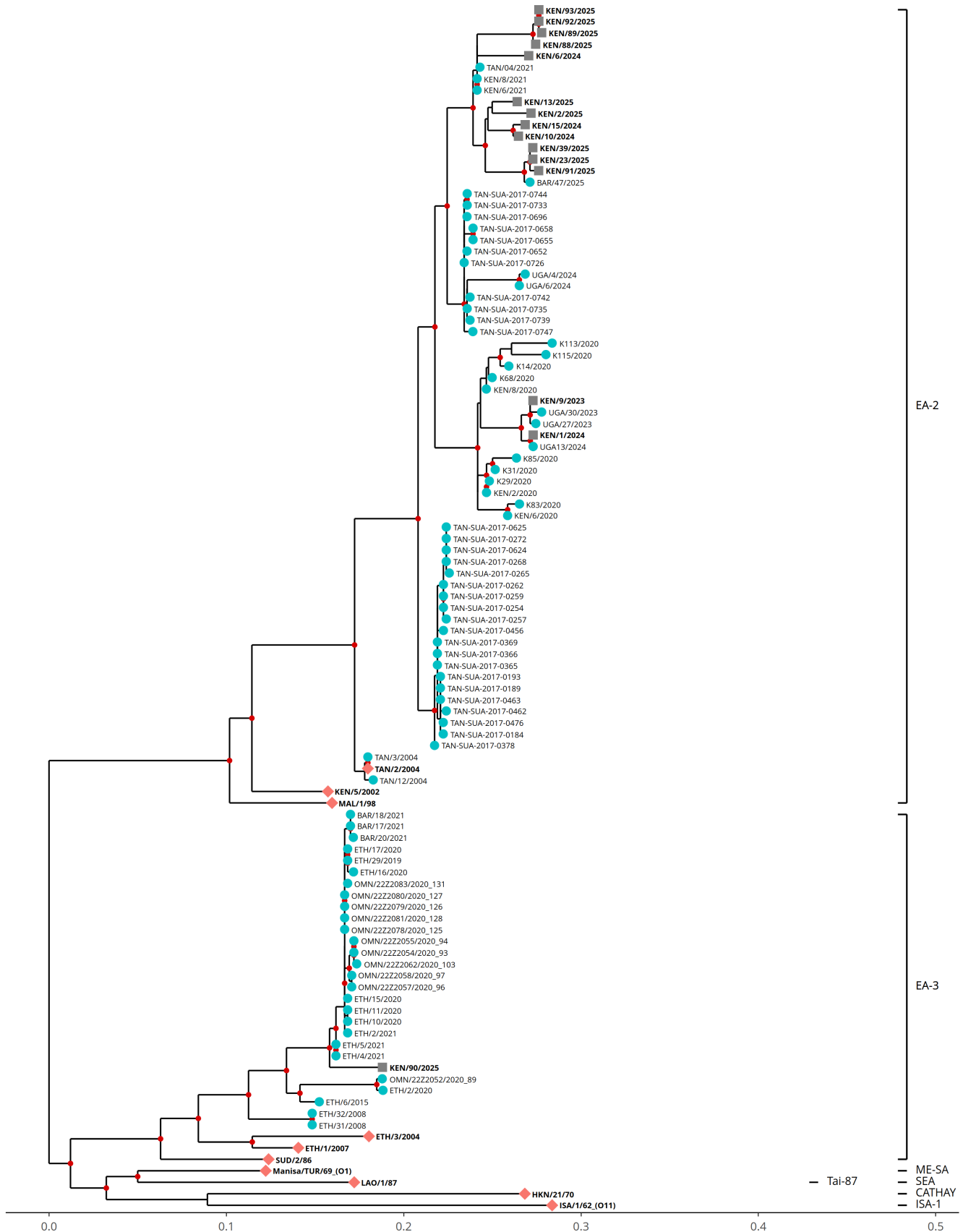
## Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
<b>FMDV VP1 Sequences</b>								
659101	KEN/3/2023	Cattle	97.79	0	O	EA-2	None	None
659104	KEN/7/2023	Cattle	97.79	0	O	EA-2	None	None
659141	UGA/23/2023	Bovine	97.63	0	O	EA-2	None	None
659140	UGA/21/2023	Bovine	97.47	0	O	EA-2	None	None
297320	KEN/6/2021	Cattle	96.84	0	O	EA-2	None	None
297321	KEN/8/2021	Cattle	96.84	0	O	EA-2	None	None
855487	TAN/04/2021	Cattle	96.68	0	O	EA-2	None	None
855488	TAN/08/2021	Cattle	96.52	0	O	EA-2	None	None
659097	KEN/2/2022	Cattle	96.21	0	O	EA-2	None	None
659102	KEN/4/2023	Cattle	95.26	0	O	EA-2	None	None
<b>FMDV VP1 Prototype Sequences*</b>								
15062	TAN/2/2004	Bovine	92.73	0	O	EA-2	None	None
10106	KEN/5/2002	Bovine	88.94	0	O	EA-2	None	None
17205	UGA/3/2002		88.15	1	O	EA-2	None	None
10699	MAL/1/98		87.52	0	O	EA-2	None	None
14466	SRL/1/78		84.27	0	O	WCSA-1	Sri-77	None
14798	SYR/18/62		84.04	0	O	WCSA-1	Syr-62	None
3294	BHU/3/2009	Cattle	83.94	0	O	ME-SA	Ind-2001	d
10481	LAO/2/2006	Cattle	83.89	0	O	ME-SA	PanAsia	None
9823	K83/79		83.78	0	O	EA-1	None	None
14465	SRL/1/2019	Cattle	83.75	0	O	ME-SA	SA-2018	None

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

# Tree

■ Uploaded sequence  
 ● Database sequence  
 ◆ Reference sequence



# Analysis Parameters

**Query sequence set:** WRLFMD/2025/000017  
**Number of related sequences reported:** 80  
**Number of prototype sequences in tree:** 10  
**Minimal VP1 subsequence match length:** 610  
**Sequence alignment length:** 633

**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
BAR/47/2025	None	Cattle	WRLFMD	Bahrain	O/EA-2	None
TAN/12/2004	KF561681	Bovine	WRLFMD	Tanzania	O/EA-2	None
TAN/3/2004	KF561680	Bovine	WRLFMD	Tanzania	O/EA-2	None
TAN-SUA-2017-0184 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0189 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0193 *	None		SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0254 *	None		SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0257 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0259 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0262 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0265 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0268 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0272 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0365 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0366 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0369 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0378 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0456 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0462 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0463 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0476 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0624 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0625 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0652 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0655 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0658 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0696 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0726 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0733 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0735 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0739 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0742 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0744 *	None	Cattle	SUA	Tanzania	O/EA-2	None
TAN-SUA-2017-0747 *	None	Cattle	SUA	Tanzania	O/EA-2	None
BAR/17/2021	None	Cattle	WRLFMD	Bahrain	O/EA-3	None
BAR/18/2021	None	Cattle	WRLFMD	Bahrain	O/EA-3	None
BAR/20/2021	None	Cattle	WRLFMD	Bahrain	O/EA-3	None
ETH/29/2019	PQ847891	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/2/2020	PQ847892	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/10/2020	PQ847895	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/11/2020	PQ847896	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/15/2020	PQ847898	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/16/2020	PQ847899	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/17/2020	PQ847900	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/2/2021	PQ847902	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/4/2021	PQ847903	Bovine	WRLFMD	Ethiopia	O/EA-3	None
ETH/5/2021	PQ847904	Bovine	WRLFMD	Ethiopia	O/EA-3	None
KEN/2/2020	None	Cattle	WRLFMD	Kenya	O/EA-2	None
KEN/6/2020	None	Cattle	WRLFMD	Kenya	O/EA-2	None
KEN/8/2020	None	Cattle	WRLFMD	Kenya	O/EA-2	None
KEN/6/2021	None	Cattle	WRLFMD	Kenya	O/EA-2	None
KEN/8/2021	None	Cattle	WRLFMD	Kenya	O/EA-2	None
OMN/22Z2052/2020_89 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2083/2020_131 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2078/2020_125 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2079/2020_126 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2080/2020_127 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2081/2020_128 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2054/2020_93 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2055/2020_94 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2057/2020_96 *	None	Cattle	ANSES	Oman	O/EA-3	None
OMN/22Z2058/2020_97 *	None	Cattle	ANSES	Oman	O/EA-3	None

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

Sequence Name	GenBank Accession	Host	Ref Lab	Country	FMDV Taxonomy	Pubmed Reference Number
OMN/22Z2062/2020_103 *	None	Cattle	ANSES	Oman	O/EA-3	None
K115/2020 *	OP184902	Bovine	EMBAKASI	Kenya	O/EA-2	None
K14/2020 *	OP184908	Bovine	EMBAKASI	Kenya	O/EA-2	None
K31/2020 *	OP184906	Bovine	EMBAKASI	Kenya	O/EA-2	None
K29/2020 *	OP184903	Bovine	EMBAKASI	Kenya	O/EA-2	None
K68/2020 *	OP184909	Bovine	EMBAKASI	Kenya	O/EA-2	None
K83/2020 *	OP184904	Bovine	EMBAKASI	Kenya	O/EA-2	None
K85/2020 *	OP184907	Bovine	EMBAKASI	Kenya	O/EA-2	None
K113/2020 *	OP184905	Bovine	EMBAKASI	Kenya	O/EA-2	None
ETH/31/2008	MN987362	Cattle	WRLFMD	Ethiopia	O/EA-3	None
ETH/32/2008	MN987363	Cattle	WRLFMD	Ethiopia	O/EA-3	None
ETH/6/2015	MN987423	Bovine	WRLFMD	Ethiopia	O/EA-3	None
UGA/27/2023	None	Bovine	WRLFMD	Uganda	O/EA-2	None
UGA/30/2023	None	Bovine	WRLFMD	Uganda	O/EA-2	None
UGA/4/2024	None	Bovine	WRLFMD	Uganda	O/EA-2	None
UGA/6/2024	None	Bovine	WRLFMD	Uganda	O/EA-2	None
UGA13/2024 *	None	Bovine	BVI	Uganda	O/EA-2	None
TAN/04/2021 *	OM802509	Cattle	SUA	Tanzania	O/EA-2	None

\* Not a WRLFMD Reference Number;

^ Not Available