

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

Genotyping Report

FMDV serotype: O
Country: Uganda
Year: 2024
Batch: WRLMEG/2024/000005
No. of sequences: 1
Report date: 2nd May 2024
Report generated by: Nick Knowles
Report checked by: Don King



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

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Virus sample name:	UGA13/2024
Sender reference:	UGA13/2024
Location of origin:	n/a
Country of origin:	Uganda
Date of collection:	2024
Host species:	bovine
Serotype:	O
Topotype:	EA-2
Lineage:	
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	n/a
Created:	11/04/2024
Last updated:	01/05/2024
VIBASys IDs: sample 55141, genome 55142, sequence viba_55143, sequencing info 55144	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_48596	KEN/8/2020	cattle	97.0	0	O	EA-2		
viba_52825	K68/2020	bovine	96.7	0	O	EA-2		
viba_48580	KEN/2/2020	cattle	96.7	0	O	EA-2		
viba_52821	K29/2020	bovine	96.5	0	O	EA-2		
viba_52817	K31/2020	bovine	96.2	0	O	EA-2		
viba_52813	K14/2020	bovine	95.9	0	O	EA-2		
viba_48588	KEN/6/2020	cattle	95.6	0	O	EA-2		
viba_52833	K85/2020	bovine	95.4	0	O	EA-2		
viba_52809	K115/2020	bovine	95.3	0	O	EA-2		
viba_52829	K83/2020	bovine	95.1	0	O	EA-2		

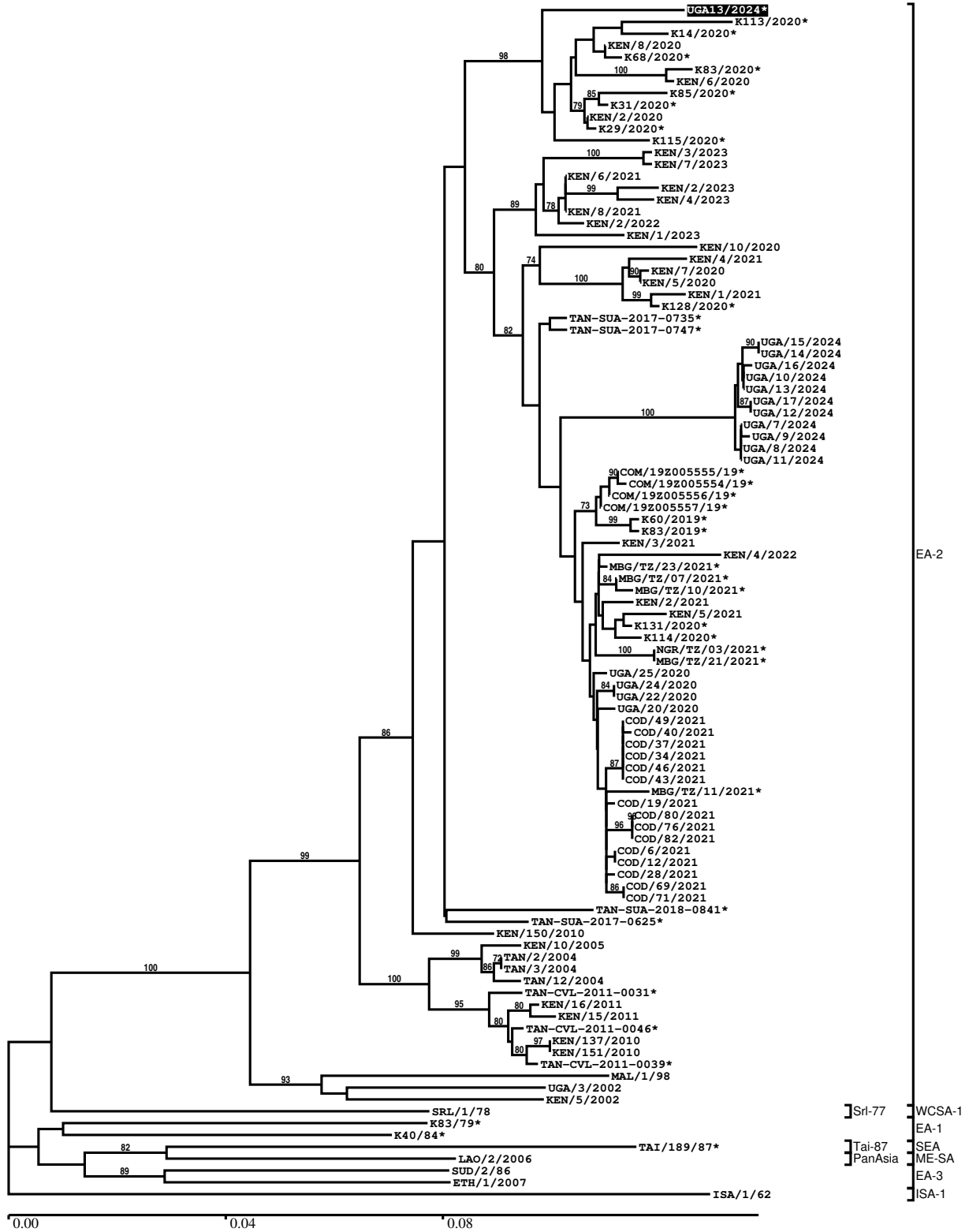
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_263	TAN/2/2004	bovine	92.6	0	O	EA-2		
viba_74	KEN/5/2002	bovine	89.1	0	O	EA-2		
viba_221	MAL/1/98		88.6	0	O	EA-2		
viba_85	UGA/3/2002		88.5	0	O	EA-2		
viba_523	K83/79		85.6	0	O	EA-1		
viba_116	SUD/2/86	bovine	85.2	0	O	EA-3		
viba_1893	K40/84	bovine	85.1	0	O	EA-1		
viba_854	ETH/1/2007	cattle	85.0	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	84.9	0	O	ME-SA	PanAsia	
viba_35331	SRL/1/78		84.9	0	O	WCSA-1	Srl-77	

Report on FMDV O in Uganda in 2024

Batch: WRLMEG/2024/000005



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLMEG/2024/000005-Uganda-O (1 sequences)
Sequence database set:	allseqs_O (6209 sequences)
Prototype sequence set:	!prototypes_O (58 sequences)
Number of related sequences reported:	10
Minimal VP1 subsequence match length	600
Sequence alignment method:	muscle (default parameters)
Sequence alignment length:	636
Phylogeny reconstruction method:	fdnadist, fneighbor
Number of bootstrap samples:	1000
Random seed for bootstrapping:	1
Displaying bootstrap values above:	70.0%
Number of sequences in tree capped at:	100
Number of prototype sequences in tree:	10
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
UGA13/2024*	n/a	bovine	BVI	Uganda	EA-2
K113/2020*	OP184905	bovine	EMBAKASI	Kenya	EA-2
K14/2020*	OP184908	bovine	EMBAKASI	Kenya	EA-2
KEN/8/2020	n/a	cattle	WRLFMD	Kenya	EA-2
K68/2020*	OP184909	bovine	EMBAKASI	Kenya	EA-2
K83/2020*	OP184904	bovine	EMBAKASI	Kenya	EA-2
KEN/6/2020	n/a	cattle	WRLFMD	Kenya	EA-2
K85/2020*	OP184907	bovine	EMBAKASI	Kenya	EA-2
K31/2020*	OP184906	bovine	EMBAKASI	Kenya	EA-2
KEN/2/2020	n/a	cattle	WRLFMD	Kenya	EA-2
K29/2020*	OP184903	bovine	EMBAKASI	Kenya	EA-2
K115/2020*	OP184902	bovine	EMBAKASI	Kenya	EA-2
KEN/3/2023	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/7/2023	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/6/2021	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/2/2023	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/4/2023	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/8/2021	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/2/2022	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/1/2023	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/10/2020	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/4/2021	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/7/2020	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/5/2020	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/1/2021	n/a	cattle	WRLFMD	Kenya	EA-2
K128/2020*	OP184910	bovine	EMBAKASI	Kenya	EA-2
TAN-SUA-2017-0735*	n/a	cattle	SUA	Tanzania	EA-2
TAN-SUA-2017-0747*	n/a	cattle	SUA	Tanzania	EA-2
UGA/15/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/14/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/16/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/10/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/13/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/17/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/12/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/7/2024	n/a	n/a	WRLFMD	Uganda	EA-2

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label	accession	host(s)	lab	country	taxonomic information
UGA/9/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/8/2024	n/a	n/a	WRLFMD	Uganda	EA-2
UGA/11/2024	n/a	n/a	WRLFMD	Uganda	EA-2
COM/19Z005555/19*	n/a	cattle	ANSES	Comoros	EA-2
COM/19Z005554/19*	n/a	cattle	ANSES	Comoros	EA-2
COM/19Z005556/19*	n/a	cattle	ANSES	Comoros	EA-2
COM/19Z005557/19*	n/a	cattle	ANSES	Comoros	EA-2
K60/2019*	OP184914	bovine	EMBAKASI	Kenya	EA-2
K83/2019*	OP184915	bovine	EMBAKASI	Kenya	EA-2
KEN/3/2021	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/4/2022	n/a	cattle	WRLFMD	Kenya	EA-2
MBG/TZ/23/2021*	OQ615919	zebu cattle	SUA	Tanzania	EA-2
MBG/TZ/07/2021*	OQ615920	zebu cattle	SUA	Tanzania	EA-2
MBG/TZ/10/2021*	OQ615921	zebu cattle	SUA	Tanzania	EA-2
KEN/2/2021	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/5/2021	n/a	cattle	WRLFMD	Kenya	EA-2
K131/2020*	OP184912	bovine	EMBAKASI	Kenya	EA-2
K114/2020*	OP184913	bovine	EMBAKASI	Kenya	EA-2
NGR/TZ/03/2021*	OQ615917	zebu cattle	SUA	Tanzania	EA-2
MBG/TZ/21/2021*	OQ615918	zebu cattle	SUA	Tanzania	EA-2
UGA/25/2020	n/a	cattle	WRLFMD	Uganda	EA-2
UGA/24/2020	n/a	cattle	WRLFMD	Uganda	EA-2
UGA/22/2020	n/a	cattle	WRLFMD	Uganda	EA-2
UGA/20/2020	n/a	cattle	WRLFMD	Uganda	EA-2
COD/49/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/40/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/37/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/34/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/46/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/43/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
MBG/TZ/11/2021*	OQ615922	zebu cattle	SUA	Tanzania	EA-2
COD/19/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/80/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/76/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/82/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/6/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/12/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/28/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/69/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2

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label	accession	host(s)	lab	country	taxonomic information
COD/71/2021	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
TAN-SUA-2018-0841*	n/a	porcine	SUA	Tanzania	EA-2
TAN-SUA-2017-0625*	n/a	cattle	SUA	Tanzania	EA-2
KEN/150/2010	KF135286	cattle	WRLFMD	Kenya	EA-2
KEN/10/2005	n/a	cattle	WRLFMD	Kenya	EA-2
TAN/2/2004	KF561679	bovine	WRLFMD	Tanzania	EA-2
TAN/3/2004	KF561680	bovine	WRLFMD	Tanzania	EA-2
TAN/12/2004	KF561681	bovine	WRLFMD	Tanzania	EA-2
TAN-CVL-2011-0031*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
KEN/16/2011	KF135293	cattle	WRLFMD	Kenya	EA-2
KEN/15/2011	KF135292	cattle	WRLFMD	Kenya	EA-2
TAN-CVL-2011-0046*	n/a	bovine	CVL	Tanzania	EA-2
KEN/137/2010	KF135282	cattle	WRLFMD	Kenya	EA-2
KEN/151/2010	KF135287	cattle	WRLFMD	Kenya	EA-2
TAN-CVL-2011-0039*	n/a	bovine	CVL	Tanzania	EA-2
MAL/1/98	DQ165074	n/a	WRLFMD	Malawi	EA-2
UGA/3/2002	DQ165077	n/a	WRLFMD	Uganda	EA-2
KEN/5/2002	DQ165073	bovine	WRLFMD	Kenya	EA-2
SRL/1/78	MK390916	n/a	WRLFMD	Sri Lanka	WCSA-1/Srl-77
K83/79*	AJ303511	n/a	WRLFMD	Kenya	EA-1
K40/84*	KY091280	bovine	WRLFMD	Kenya	EA-1
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA/Tai-87
LAO/2/2006	EU667451	cattle	WRLFMD	Laos	ME-SA/PanAsia
SUD/2/86	DQ165075	bovine	WRLFMD	Sudan	EA-3
ETH/1/2007	FJ798137	cattle	WRLFMD	Ethiopia	EA-3
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

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n/a, not available