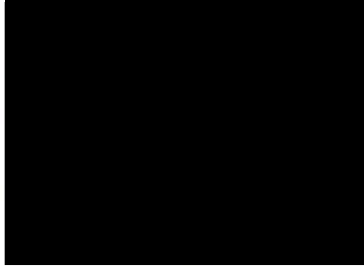




FMD Genotyping Reports

Lab Reference WRL batch Number: WRLFMD/2026/000001

Sender Details:



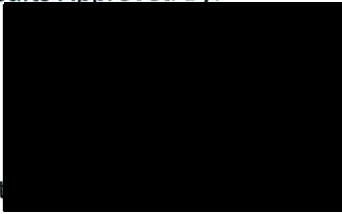
Date Received: 28th January 2026

Country of Origin*: South Africa

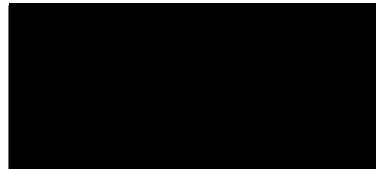
Work has now been completed in respect of the samples recently submitted and the details are as attached.

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

Results Approved By:



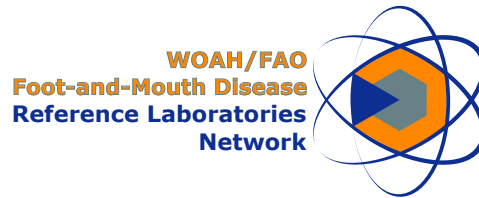
Official Stamp:



Date

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: 13 February 2026

Citation: WRLFMD. 2026. FMDV Genotyping Report [WRLFMD/2026/000001]. (Accessed 13/02/26)

FMDV serotype: SAT3

Country: South Africa

Year: 2024

Batch: WRLFMD/2026/000001

No. of sequences: 2

Reported date: 13 February 2026

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

Email: reporting@pirbright.ac.uk

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FMDtype is supported through funding from

Virus sample: SAR/1/2024

Sample details

Reception Date:	2026-01-28
Sender reference:	24/0829
Location of origin:	Humansdorp, Eastern Cape
Country of origin:	South Africa
Date of collection:	2024-04-30
Host species:	cattle

Genotyping details

Serotype:	SAT3
Topotype:	I
Lineage:	None
Sublineage:	None

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	NA
Sequence length:	651
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
1114171	SAR/03/2024	Bovine	100.00	0	SAT3	I	None	None
1114173	SAR/05/2024	Bovine	100.00	0	SAT3	I	None	None
1114172	SAR/04/2024	Bovine	99.85	0	SAT3	I	None	None
1114161	SAR/08/2022	Bovine	95.99	0	SAT3	I	None	None
1114162	SAR/09/2022	Bovine	95.99	0	SAT3	I	None	None
1114163	SAR/10/2022	Bovine	95.99	0	SAT3	I	None	None
1114164	SAR/11/2022	Bovine	95.99	0	SAT3	I	None	None
1114165	SAR/18/2022	Bovine	95.83	0	SAT3	I	None	None
1114166	SAR/22/2022	Bovine	95.83	0	SAT3	I	None	None
1114170	SAR/44/2022	Bovine	95.83	0	SAT3	I	None	None
FMDV VP1 Prototype Sequences*								
14008	KNP/10/90	African Buffalo	84.23	0	SAT3	I	None	None
3185	BEC/20/61		77.55	0	SAT3	II	None	None

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

Virus sample: SAR/2/2024

Sample details

Reception Date:	2026-01-28
Sender reference:	24/0914-3
Location of origin:	Castledale, Berlin, Eastern Cape
Country of origin:	South Africa
Date of collection:	2024-06-12
Host species:	cattle

Genotyping details

Serotype:	SAT3
Topotype:	I
Lineage:	None
Sublineage:	None

Sequencing details

Material submitted for sequencing:	WRL-LFBK2
Material Harvest Date:	NA
Sequence length:	651
Ambiguities:	0

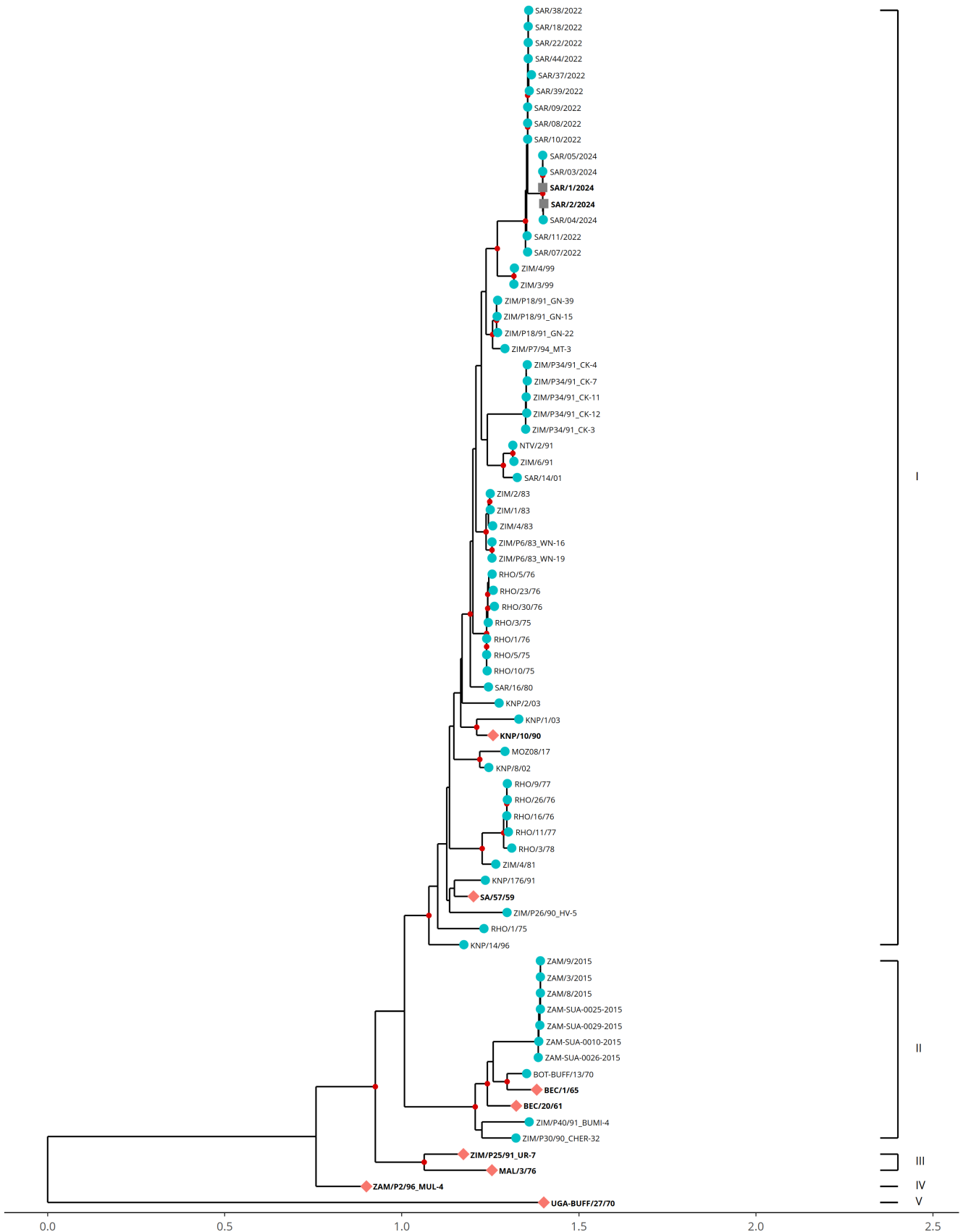
Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
1114172	SAR/04/2024	Bovine	99.85	0	SAT3	I	None	None
1114171	SAR/03/2024	Bovine	99.69	0	SAT3	I	None	None
1114173	SAR/05/2024	Bovine	99.69	0	SAT3	I	None	None
1114161	SAR/08/2022	Bovine	95.68	0	SAT3	I	None	None
1114162	SAR/09/2022	Bovine	95.68	0	SAT3	I	None	None
1114163	SAR/10/2022	Bovine	95.68	0	SAT3	I	None	None
1114164	SAR/11/2022	Bovine	95.68	0	SAT3	I	None	None
1114168	SAR/38/2022	Bovine	95.68	0	SAT3	I	None	None
1114165	SAR/18/2022	Bovine	95.53	0	SAT3	I	None	None
1114166	SAR/22/2022	Bovine	95.53	0	SAT3	I	None	None
FMDV VP1 Prototype Sequences*								
14008	KNP/10/90	African Buffalo	84.23	0	SAT3	I	None	None
10712	MAL/3/76	Cattle	77.71	0	SAT3	III	None	None
3185	BEC/20/61		77.39	0	SAT3	II	None	None

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

Tree

■ Uploaded sequence ● Database sequence ◆ Reference sequence



Analysis Parameters

Query sequence set: WRLFMD/2026/000001
Number of related sequences reported: 65
Number of prototype sequences in tree: 8
Minimal VP1 subsequence match length: 610
Sequence alignment length: 655

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
SAR/07/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/08/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/09/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/10/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/11/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/18/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/22/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/37/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/38/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/39/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/44/2022 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/03/2024 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/04/2024 *	None	Bovine	OVI	South Africa	SAT3/I	None
SAR/05/2024 *	None	Bovine	OVI	South Africa	SAT3/I	None
MOZ08/17 *	None	Bovine	BVI	Mozambique	SAT3/I	None
RHO/1/75	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/1/76	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/10/75	None	Greater Kudu	WRLFMD	Rhodesia	SAT3/I	None
RHO/11/77	MH053348	Cattle	WRLFMD	Rhodesia	SAT3/I	29652800
RHO/16/76	MH053346	Cattle	WRLFMD	Rhodesia	SAT3/I	29652800
RHO/23/76	MH053347	Cattle	WRLFMD	Rhodesia	SAT3/I	29652800
RHO/26/76	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/3/75	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/3/78	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/30/76	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/5/75	MH053345	Cattle	WRLFMD	Rhodesia	SAT3/I	29652800
RHO/5/76	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
RHO/9/77	None	Cattle	WRLFMD	Rhodesia	SAT3/I	None
NTV/2/91	None	African Buffalo	WRLFMD	South Africa	SAT3/I	None
SAR/14/01 *	MK415740	African Buffalo	OVI	South Africa	SAT3/I	None
SAR/16/80	None	African Buffalo	WRLFMD	South Africa	SAT3/I	None
KNP/1/03 *	MK415737	African Buffalo	OVI	South Africa (Kruger National Park)	SAT3/I	None
KNP/14/96 *	MK415741	African Buffalo	OVI	South Africa (Kruger National Park)	SAT3/I	None
KNP/176/91	None	African Buffalo	WRLFMD	South Africa (Kruger National Park)	SAT3/I	None
KNP/2/03 *	MK415738	African Buffalo	OVI	South Africa (Kruger National Park)	SAT3/I	None
KNP/8/02 *	MK415739	African Buffalo	OVI	South Africa (Kruger National Park)	SAT3/I	None
ZAM/3/2015	MZ486078	Bovine	WRLFMD	Zambia	SAT3/II	None
ZAM/8/2015 *	MZ486079	Cattle	BVI	Zambia	SAT3/II	None
ZAM/9/2015 *	MZ486080	Cattle	BVI	Zambia	SAT3/II	None
ZAM-SUA-0010-2015 *	None	Cattle	SUA	Zambia	SAT3/II	None
ZAM-SUA-0025-2015 *	None	Cattle	SUA	Zambia	SAT3/II	None
ZAM-SUA-0026-2015 *	None	Cattle	SUA	Zambia	SAT3/II	None
ZAM-SUA-0029-2015 *	None	Cattle	SUA	Zambia	SAT3/II	None
ZIM/1/83	None	Cattle	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/2/83	None	Cattle	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/3/99	None	Cattle	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/4/81 *	KX375417	Cattle	APQA	Zimbabwe	SAT3/I	None
ZIM/4/83	None	Cattle	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/4/99	None	Cattle	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/6/91	KM268901	Cattle	WRLFMD	Zimbabwe	SAT3/I	25269623
ZIM/P18/91_GN-15	MT385671	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P18/91_GN-22	MT385672	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P18/91_GN-39	MT385673	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P26/90_HV-5	MT385662	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P30/90_CHER-32	MT385669	African Buffalo	WRLFMD	Zimbabwe	SAT3/II	None
ZIM/P34/91_CK-11	MT385695	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P34/91_CK-12	MT385696	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P34/91_CK-3	MT385690	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P34/91_CK-4	MT385691	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P34/91_CK-7	MT385693	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
ZIM/P40/91_BUMI-4	MT385697	African Buffalo	WRLFMD	Zimbabwe	SAT3/II	None
ZIM/P6/83_WN-16	MH053349	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	29652800

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

Sequence Name	GenBank Accession	Host	Ref Lab	Country	FMDV Taxonomy	Pubmed Reference Number
ZIM/P6/83_WN-19	MH053350	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	29652800
ZIM/P7/94_MT-3	MT385701	African Buffalo	WRLFMD	Zimbabwe	SAT3/I	None
BOT-BUFF/13/70	MH053339	African Buffalo	WRLFMD	Botswana	SAT3/II	29652800

* Not a WRLFMD Reference Number;

ˆ Not Available