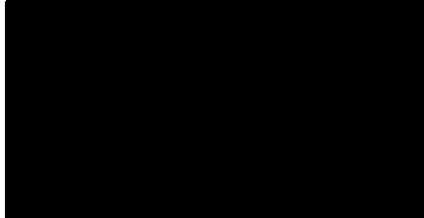




FMD Genotyping Report

Lab Reference WRL batch Number: WRLFMD/2026/000003

Sender Details:



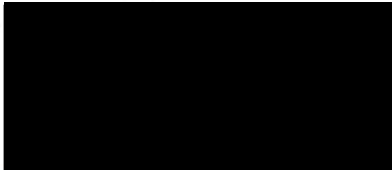
Date Received: 30th January 2026

Country of Origin*: Bhutan

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

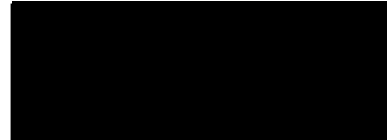
Please note that all our phylogenetic trees can be accessed via the internet at: <http://www.wrlfmd.org/>

Results Approved By:



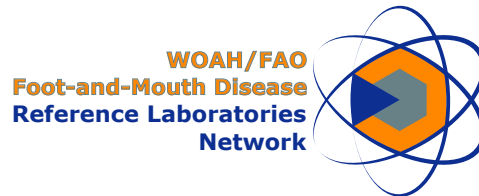
Date: 14th April 2026

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).

* 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: 14 April 2026

Citation: WRLFMD. 2026. FMDV Genotyping Report [WRLFMD/2026/000003]. (Accessed 14/04/26)

FMDV serotype: O

Country: Bhutan

Year: 2017, 2019, 2024

Batch: WRLFMD/2026/000003

No. of sequences: 7

Reported date: 14 April 2026

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

Email: reporting@pirbright.ac.uk

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FMDtype is supported through funding from



Virus sample: BHU/32/2017

Sample details

Reception Date:	2026-01-30
Sender reference:	2
Location of origin:	Lamgong, Paro
Country of origin:	Bhutan
Date of collection:	2017-12-06
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:	2026-02-17
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
3234	BHU/11/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3244	BHU/15/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3246	BHU/16/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3248	BHU/17/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3269	BHU/21/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3271	BHU/22/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3345	BHU/8/2017	Cattle	100.00	0	O	ME-SA	Ind-2001	e
3238	BHU/12/2017	Cattle	99.84	0	O	ME-SA	Ind-2001	e
3240	BHU/13/2017	Cattle	99.84	0	O	ME-SA	Ind-2001	e
3242	BHU/14/2017	Cattle	99.84	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	96.83	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	93.04	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		91.63	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		91.00	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	90.69	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	89.24	0	O	ME-SA	Srl-97	None
12780	PAK/58/2012	Cattle	88.78	0	O	ME-SA	PanAsia-2	ICT-12
12855	PAK/7/2016	Cattle	88.78	0	O	ME-SA	PanAsia-2	PUN-16
17602	UKG/35/2001		88.15	0	O	ME-SA	PanAsia	None
8590	IRN/31/2009	Cattle	87.97	0	O	ME-SA	PanAsia-2	FAR-09

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

Virus sample: BHU/12/2019

Sample details

Reception Date:	2026-01-30
Sender reference:	4
Location of origin:	Dotey, Paro
Country of origin:	Bhutan
Date of collection:	2019-01-21
Host species:	cattle

Genotyping details

Serotype:	0
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e

Sequencing details

Material submitted for sequencing:	WRL-LFBK1
Material Harvest Date:	2026-02-17
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
3231	BHU/10/2019	Cattle	100.00	0	0	ME-SA	Ind-2001	e
3354	BHU/9/2019	Cattle	100.00	0	0	ME-SA	Ind-2001	e
3262	BHU/2/2018	Cattle	99.21	0	0	ME-SA	Ind-2001	e
3298	BHU/3/2018	Cattle	99.21	0	0	ME-SA	Ind-2001	e
3334	BHU/6/2018	Cattle	99.21	0	0	ME-SA	Ind-2001	e
3353	BHU/9/2018	Goat	99.21	0	0	ME-SA	Ind-2001	e
297194	IND/IC214/2018	Cattle	99.21	0	0	ME-SA	Ind-2001	e
297585	OMN/22Z2009/2018_30	Cattle	99.21	0	0	ME-SA	Ind-2001	e
485425	OMN/22Z002005/2018_26	Cattle	99.21	0	0	ME-SA	Ind-2001	e
11440	NEP/14/2018	Cattle	99.05	0	0	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	97.47	0	0	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	93.35	0	0	ME-SA	Ind-2001	d
11999	OMN/7/2001		92.26	0	0	ME-SA	Ind-2001	b
10350	KUW/3/97		91.31	0	0	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	90.67	0	0	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	90.06	0	0	ME-SA	Ind-2001	c
12780	PAK/58/2012	Cattle	88.94	0	0	ME-SA	PanAsia-2	ICT-12
12855	PAK/7/2016	Cattle	88.94	0	0	ME-SA	PanAsia-2	PUN-16
17602	UKG/35/2001		88.78	0	0	ME-SA	PanAsia	None
8590	IRN/31/2009	Cattle	88.61	0	0	ME-SA	PanAsia-2	FAR-09

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

Virus sample: BHU/3/2024

Sample details

Reception Date:	2026-01-30
Sender reference:	16
Location of origin:	Yalang, Tashigang
Country of origin:	Bhutan
Date of collection:	2024-10-01
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:	2026-02-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659112	NEP/8/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659113	NEP/9/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659116	NEP/15/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659118	NEP/17/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659117	NEP/16/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659119	NEP/21/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659122	NEP/3/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659130	NEP/16/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659115	NEP/14/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659120	NEP/1/2024	Cattle	97.95	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.99	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.30	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.20	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.26	0	O	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	88.61	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	88.49	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	88.19	0	O	ME-SA	PanAsia-2	PUN-16
12780	PAK/58/2012	Cattle	87.84	0	O	ME-SA	PanAsia-2	ICT-12
15944	Manisa/TUR/69_(O1)		87.50	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	87.24	0	O	ME-SA	PanAsia	None

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

Virus sample: BHU/4/2024

Sample details

Reception Date:	2026-01-30
Sender reference:	17
Location of origin:	Yalang, Tashigang
Country of origin:	Bhutan
Date of collection:	2024-10-01
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:	2026-02-18
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659112	NEP/8/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659113	NEP/9/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659116	NEP/15/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659118	NEP/17/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659117	NEP/16/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659119	NEP/21/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659122	NEP/3/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659130	NEP/16/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659115	NEP/14/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659120	NEP/1/2024	Cattle	97.95	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.99	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.30	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.20	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.26	0	O	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	88.61	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	88.49	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	88.19	0	O	ME-SA	PanAsia-2	PUN-16
12780	PAK/58/2012	Cattle	87.84	0	O	ME-SA	PanAsia-2	ICT-12
15944	Manisa/TUR/69_(O1)		87.50	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	87.24	0	O	ME-SA	PanAsia	None

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

Virus sample: BHU/5/2024

Sample details

Reception Date:	2026-01-30
Sender reference:	18
Location of origin:	Yalang, Tashigang
Country of origin:	Bhutan
Date of collection:	2024-10-01
Host species:	cattle

Genotyping details

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

Sequencing details

Material submitted for sequencing:	WRL-LFBK1 (T); WRL-LFBK2 (T)
Material Harvest Date:	26-03-20
Sequence length:	636
Ambiguities:	0

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659112	NEP/8/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659113	NEP/9/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659116	NEP/15/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659118	NEP/17/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659117	NEP/16/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659119	NEP/21/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659122	NEP/3/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659130	NEP/16/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659115	NEP/14/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659120	NEP/1/2024	Cattle	97.95	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.99	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.30	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.20	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.26	0	O	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	88.61	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	88.49	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	88.19	0	O	ME-SA	PanAsia-2	PUN-16
12780	PAK/58/2012	Cattle	87.84	0	O	ME-SA	PanAsia-2	ICT-12
15944	Manisa/TUR/69_(O1)		87.50	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	87.24	0	O	ME-SA	PanAsia	None

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

Virus sample: BHU/6/2024

Sample details

Reception Date:	2026-01-30
Sender reference:	19
Location of origin:	Yalang, Tashigang
Country of origin:	Bhutan
Date of collection:	2024-10-01
Host species:	cattle

Genotyping details

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

Sequencing details

Material submitted for sequencing:	WRL-LFBK1 (T); WRL-LFBK2 (T)
Material Harvest Date:	26-03-20
Sequence length:	636
Ambiguities:	2

Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659112	NEP/8/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659113	NEP/9/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659116	NEP/15/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659118	NEP/17/2023	Cattle	97.95	0	O	ME-SA	Ind-2001	e
659117	NEP/16/2023	Cattle	97.79	0	O	ME-SA	Ind-2001	e
659119	NEP/21/2023	Cattle	97.79	0	O	ME-SA	Ind-2001	e
659122	NEP/3/2024	Cattle	97.79	0	O	ME-SA	Ind-2001	e
659130	NEP/16/2024	Cattle	97.79	0	O	ME-SA	Ind-2001	e
659115	NEP/14/2023	Cattle	97.63	0	O	ME-SA	Ind-2001	e
659120	NEP/1/2024	Cattle	97.63	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.83	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.14	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.05	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.10	0	O	ME-SA	Ind-2001	a
17330	UAE/4/2008	Gazelle	88.33	0	O	ME-SA	Ind-2001	c
14504	SRL/2/97	Bovine	88.29	0	O	ME-SA	Srl-97	None
12855	PAK/7/2016	Cattle	88.19	0	O	ME-SA	PanAsia-2	PUN-16
12780	PAK/58/2012	Cattle	87.84	0	O	ME-SA	PanAsia-2	ICT-12
15944	Manisa/TUR/69_(O1)		87.34	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	87.09	0	O	ME-SA	PanAsia	None

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

Virus sample: BHU/7/2024

Sample details

Reception Date:	2026-01-30
Sender reference:	20
Location of origin:	Toetsho, Trashiyangtse
Country of origin:	Bhutan
Date of collection:	2024-10-01
Host species:	cattle

Genotyping details

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

Sequencing details

Material submitted for sequencing:	WRL-LFBK1 (T); WRL-LFBK2 (T)
Material Harvest Date:	26-03-20
Sequence length:	636
Ambiguities:	0

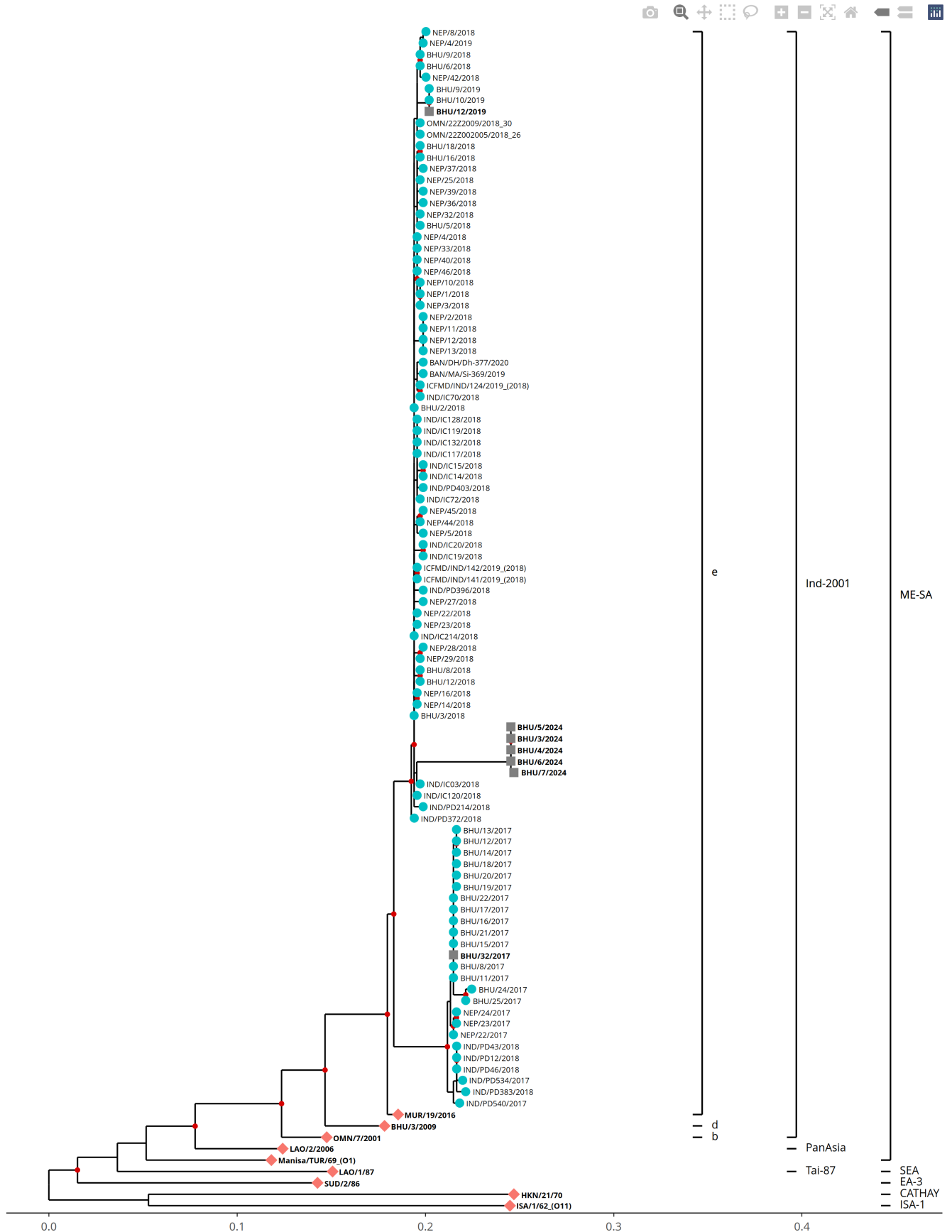
Most Closely Related FMDV Isolates

Sequence ID	Virus Name	Host	% Id	#Ambig.	Serotype	Topotype	Lineage	Sublineage
FMDV VP1 Sequences								
659112	NEP/8/2023	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659113	NEP/9/2023	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659116	NEP/15/2023	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659118	NEP/17/2023	Cattle	98.42	0	O	ME-SA	Ind-2001	e
659117	NEP/16/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659119	NEP/21/2023	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659122	NEP/3/2024	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659130	NEP/16/2024	Cattle	98.26	0	O	ME-SA	Ind-2001	e
659115	NEP/14/2023	Cattle	98.10	0	O	ME-SA	Ind-2001	e
659120	NEP/1/2024	Cattle	98.10	0	O	ME-SA	Ind-2001	e
FMDV VP1 Prototype Sequences*								
10989	MUR/19/2016	Cattle	93.83	0	O	ME-SA	Ind-2001	e
3294	BHU/3/2009	Cattle	91.14	0	O	ME-SA	Ind-2001	d
11999	OMN/7/2001		90.05	0	O	ME-SA	Ind-2001	b
10350	KUW/3/97		89.10	0	O	ME-SA	Ind-2001	a
14504	SRL/2/97	Bovine	88.45	0	O	ME-SA	Srl-97	None
17330	UAE/4/2008	Gazelle	88.33	0	O	ME-SA	Ind-2001	c
12855	PAK/7/2016	Cattle	88.03	0	O	ME-SA	PanAsia-2	PUN-16
12780	PAK/58/2012	Cattle	87.68	0	O	ME-SA	PanAsia-2	ICT-12
15944	Manisa/TUR/69_(O1)		87.34	0	O	ME-SA	None	None
10481	LAO/2/2006	Cattle	87.09	0	O	ME-SA	PanAsia	None

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

Tree

■ Uploaded sequence
 ● Database sequence
 ◆ Reference sequence



Analysis Parameters

Query sequence set: WRLFMD/2026/000003
Number of related sequences reported: 88
Number of prototype sequences in tree: 9
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
NEP/1/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/10/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/11/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/12/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/13/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/14/2018	MT276849	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/16/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/2/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/22/2017	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/22/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/23/2017	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/23/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/24/2017	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/25/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/27/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/28/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/29/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/3/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/32/2018	None	Pig	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/33/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/36/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/37/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/39/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/4/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/4/2019	MT276850	Water Buffalo	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/40/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/42/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/44/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/45/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/46/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/5/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
NEP/8/2018	None	Cattle	WRLFMD	Nepal	O/ME-SA/Ind-2001/e	None
BAN/MA/Si-369/2019 *	OP320433	Cattle	UNIV-DHAKA	Bangladesh	O/ME-SA/Ind-2001/e	None
BAN/DH/Dh-377/2020 *	OP320434	Cattle	UNIV-DHAKA	Bangladesh	O/ME-SA/Ind-2001/e	None
IND/PD534/2017 *	MT918989	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD540/2017 *	MT918990	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD12/2018 *	MT918993	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD43/2018 *	MT918996	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD46/2018 *	MT918998	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD214/2018 *	MT919001	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD372/2018 *	MT919006	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD383/2018 *	MT919007	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD396/2018 *	MT919008	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/PD403/2018 *	MT919010	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC03/2018 *	MT936090	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC14/2018 *	MT936091	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC15/2018 *	MT936092	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC19/2018 *	MT936095	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC20/2018 *	MT936096	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC70/2018 *	MT936099	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC72/2018 *	MT936100	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC117/2018 *	MT936101	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC119/2018 *	MT936102	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC120/2018 *	MT936103	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC128/2018 *	MT936104	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC132/2018 *	MT936105	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
IND/IC214/2018 *	MT936112	Cattle	PD-FMD	India	O/ME-SA/Ind-2001/e	None
OMN/22Z2009/2018_30 *	None	Cattle	ANSES	Oman	O/ME-SA/Ind-2001/e	None
BHU/10/2019	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/11/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/12/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/12/2018	None	Cattle	WRLFMD	Bhutan	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
BHU/13/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/14/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/15/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/16/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/16/2018	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/17/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/18/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/18/2018	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/19/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/2/2018	MT276847	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/20/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/21/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/22/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/24/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/25/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/3/2018	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/5/2018	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/6/2018	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/8/2017	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/8/2018	None	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/9/2018	None	Goat	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
BHU/9/2019	MT276848	Cattle	WRLFMD	Bhutan	O/ME-SA/Ind-2001/e	None
ICFMD/IND/141/2019_(2018) *	OQ732585	Water Buffalo	ICAR-DFMD	India	O/ME-SA/Ind-2001/e	None
ICFMD/IND/142/2019_(2018) *	OQ732586	Water Buffalo	ICAR-DFMD	India	O/ME-SA/Ind-2001/e	None
ICFMD/IND/124/2019_(2018) *	OQ732584		ICAR-DFMD	India	O/ME-SA/Ind-2001/e	None
OMN/22Z002005/2018_26 *	None	Cattle	ANSES	Oman	O/ME-SA/Ind-2001/e	None

* Not a WRLFMD Reference Number;

^ Not Available