

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

Genotyping Report

FMDV serotype: SAT2
Country: Burundi
Year: 2016
Batch: WRLMEG/2022/00026
No. of sequences: 14
Report date: 1st August 2022
Report generated by: [REDACTED]
Report checked by: [REDACTED]



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

email: reporting@pirbright.ac.uk

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Virus sample name:	BUN/1/2016
Sender reference:	SAT2/BUN/1/2016
Location of origin:	Rusaka, Mwaro province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51311, genome 51312, sequence viba_51313, sequencing info 51314	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51321	BUN/3/2016	bovine	100.0	0	SAT2	IV		
viba_51317	BUN/2/2016	bovine	99.5	0	SAT2	IV		
viba_51353	BUN/11/2016	bovine	98.8	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	98.8	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	98.8	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	98.8	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	98.8	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	98.8	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	98.8	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	98.8	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.2	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_183	ZIM/14/2002	bovine	79.2	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	78.9	1	SAT2	III		
viba_752	SA/106/59		78.6	0	SAT2	I		
viba_380	RHO/1/48		77.5	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.0	0	SAT2	II		
viba_567	ZIM/7/83	bovine	74.1	0	SAT2	II		
viba_424	SAU/6/2000	bovine	74.0	1	SAT2	VII		

Virus sample name:	BUN/2/2016
Sender reference:	SAT2/BUN/2/2016
Location of origin:	Rusaka, Mwaro province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51315, genome 51316, sequence viba_51317, sequencing info 51318	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51313	BUN/1/2016	bovine	99.5	0	SAT2	IV		
viba_51321	BUN/3/2016	bovine	99.5	0	SAT2	IV		
viba_51353	BUN/11/2016	bovine	98.3	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	98.3	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	98.3	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	98.3	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	98.3	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	98.3	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	98.3	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	98.3	0	SAT2	IV		

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_248	KEN/1/84	bovine	86.8	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.0	0	SAT2	IV		
viba_111	MAL/1/2003	bovine	79.3	0	SAT2	I		
viba_183	ZIM/14/2002	bovine	78.8	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	78.8	1	SAT2	III		
viba_752	SA/106/59		78.3	0	SAT2	I		
viba_380	RHO/1/48		77.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	74.9	0	SAT2	II		
viba_567	ZIM/7/83	bovine	73.9	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.9	1	SAT2	VII		

Virus sample name:	BUN/3/2016
Sender reference:	SAT2/BUN/3/2016
Location of origin:	Rusaka, Mwaro province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51319, genome 51320, sequence viba_51321, sequencing info 51322	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51313	BUN/1/2016	bovine	100.0	0	SAT2	IV		
viba_51317	BUN/2/2016	bovine	99.5	0	SAT2	IV		
viba_51353	BUN/11/2016	bovine	98.8	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	98.8	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	98.8	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	98.8	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	98.8	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	98.8	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	98.8	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	98.8	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.2	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_183	ZIM/14/2002	bovine	79.2	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	78.9	1	SAT2	III		
viba_752	SA/106/59		78.6	0	SAT2	I		
viba_380	RHO/1/48		77.5	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.0	0	SAT2	II		
viba_567	ZIM/7/83	bovine	74.1	0	SAT2	II		
viba_424	SAU/6/2000	bovine	74.0	1	SAT2	VII		

Virus sample name:	BUN/4/2016
Sender reference:	SAT2/BUN/4/2016
Location of origin:	Rugombo, Cibitoke province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51323, genome 51324, sequence viba_51325, sequencing info 51326	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/5/2016
Sender reference:	SAT2/BUN/5/2016
Location of origin:	Rugombo, Cibitoke province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51327, genome 51328, sequence viba_51329, sequencing info 51330	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/6/2016
Sender reference:	SAT2/BUN/6/2016
Location of origin:	Rugombo, Cibitoke province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51331, genome 51332, sequence viba_51333, sequencing info 51334	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/7/2016
Sender reference:	SAT2/BUN/7/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51335, genome 51336, sequence viba_51337, sequencing info 51338	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/8/2016
Sender reference:	SAT2/BUN/8/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51339, genome 51340, sequence viba_51341, sequencing info 51342	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51345	BUN/9/2016	bovine	100.0	0	SAT2	IV		
viba_51353	BUN/11/2016	bovine	99.7	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	99.7	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	99.7	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	99.7	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	99.7	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	99.7	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	99.7	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.4	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.8	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.4	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.6	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.1	1	SAT2	III		
viba_752	SA/106/59		78.6	0	SAT2	I		
viba_380	RHO/1/48		78.2	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.3	0	SAT2	II		
viba_567	ZIM/7/83	bovine	74.9	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/9/2016
Sender reference:	SAT2/BUN/9/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51343, genome 51344, sequence viba_51345, sequencing info 51346	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51341	BUN/8/2016	bovine	100.0	0	SAT2	IV		
viba_51353	BUN/11/2016	bovine	99.7	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	99.7	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	99.7	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	99.7	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	99.7	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	99.7	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	99.7	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.4	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.8	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.4	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.6	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.1	1	SAT2	III		
viba_752	SA/106/59		78.6	0	SAT2	I		
viba_380	RHO/1/48		78.2	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.3	0	SAT2	II		
viba_567	ZIM/7/83	bovine	74.9	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/10/2016
Sender reference:	SAT2/BUN/10/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51347, genome 51348, sequence viba_51349, sequencing info 51350	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	99.7	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	99.7	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	99.7	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	99.7	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	99.7	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	99.7	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	99.7	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	99.7	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.4	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.4	0	SAT2	IV		

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_248	KEN/1/84	bovine	86.6	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.2	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	79.8	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.1	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	78.9	1	SAT2	III		
viba_752	SA/106/59		78.6	0	SAT2	I		
viba_380	RHO/1/48		78.2	0	SAT2	III		
viba_567	ZIM/7/83	bovine	75.3	0	SAT2	II		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/11/2016
Sender reference:	SAT2/BUN/11/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51351, genome 51352, sequence viba_51353, sequencing info 51354	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/12/2016
Sender reference:	SAT2/BUN/12/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51355, genome 51356, sequence viba_51357, sequencing info 51358	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/13/2016
Sender reference:	SAT2/BUN/13/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51359, genome 51360, sequence viba_51361, sequencing info 51362	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51365	BUN/14/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

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_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Virus sample name:	BUN/14/2016
Sender reference:	SAT2/BUN/14/2016
Location of origin:	Mpinga-Kayove, Rutana province
Country of origin:	Burundi
Date of collection:	2016
Host species:	bovine
Serotype:	SAT2
Topotype:	IV
Lineage:	
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	01/08/2022
Last updated:	01/08/2022
VIBASys IDs: sample 51363, genome 51364, sequence viba_51365, sequencing info 51366	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51353	BUN/11/2016	bovine	100.0	0	SAT2	IV		
viba_51337	BUN/7/2016	bovine	100.0	0	SAT2	IV		
viba_51325	BUN/4/2016	bovine	100.0	0	SAT2	IV		
viba_51329	BUN/5/2016	bovine	100.0	0	SAT2	IV		
viba_51333	BUN/6/2016	bovine	100.0	0	SAT2	IV		
viba_51361	BUN/13/2016	bovine	100.0	0	SAT2	IV		
viba_51357	BUN/12/2016	bovine	100.0	0	SAT2	IV		
viba_51345	BUN/9/2016	bovine	99.7	0	SAT2	IV		
viba_51341	BUN/8/2016	bovine	99.7	0	SAT2	IV		
viba_51349	BUN/10/2016	bovine	99.7	0	SAT2	IV		

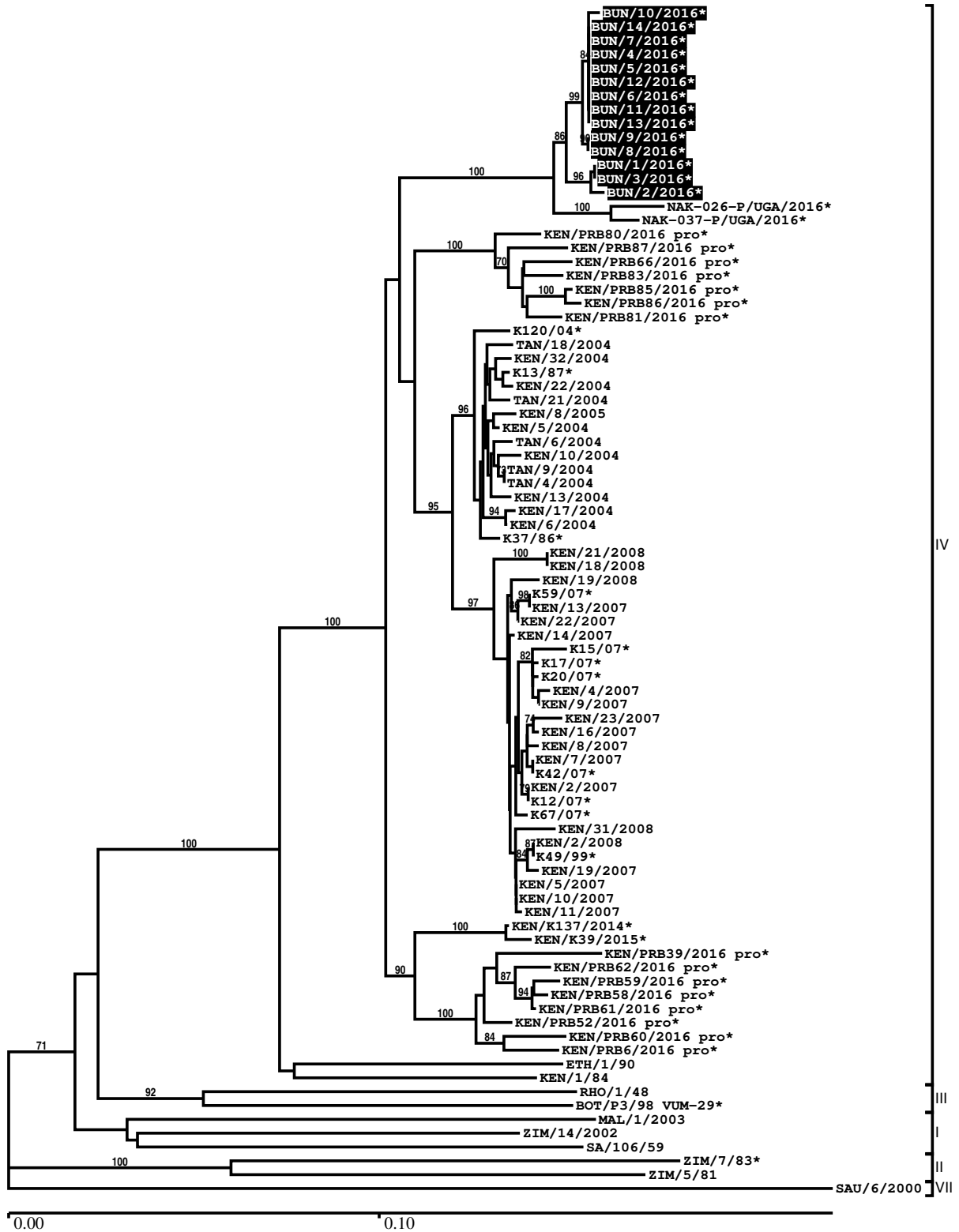
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_248	KEN/1/84	bovine	87.0	0	SAT2	IV		
viba_273	ETH/1/90	bovine	85.5	0	SAT2	IV		
viba_183	ZIM/14/2002	bovine	80.1	0	SAT2	I		
viba_111	MAL/1/2003	bovine	79.4	0	SAT2	I		
viba_451	BOT/P3/98 VUM-29	African buffalo	79.3	1	SAT2	III		
viba_752	SA/106/59		78.7	0	SAT2	I		
viba_380	RHO/1/48		78.3	0	SAT2	III		
viba_546	ZIM/5/81	bovine	75.1	0	SAT2	II		
viba_567	ZIM/7/83	bovine	75.0	0	SAT2	II		
viba_424	SAU/6/2000	bovine	73.8	1	SAT2	VII		

Report on FMDV SAT2 in Burundi in 2016

Batch: WRLMEG/2022/00026



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_SAT2
Query sequence set:	WRLMEG/2022/00026-Burundi-SAT2 (14 sequences)
Sequence database set:	allseqs_SAT2 (1113 sequences)
Prototype sequence set:	!prototypes_SAT2 (25 sequences)
Number of related sequences reported:	10
Minimal VP1 subsequence match length	600
Sequence alignment method:	muscle (default parameters)
Sequence alignment length:	642
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/SAT2

label	accession	host(s)	lab	country	taxonomic information
BUN/10/2016*	OM817513	bovine	SCIENSANO	Burundi	IV
BUN/14/2016*	OM817517	bovine	SCIENSANO	Burundi	IV
BUN/7/2016*	OM817510	bovine	SCIENSANO	Burundi	IV
BUN/4/2016*	OM817507	bovine	SCIENSANO	Burundi	IV
BUN/5/2016*	OM817508	bovine	SCIENSANO	Burundi	IV
BUN/12/2016*	OM817515	bovine	SCIENSANO	Burundi	IV
BUN/6/2016*	OM817509	bovine	SCIENSANO	Burundi	IV
BUN/11/2016*	OM817514	bovine	SCIENSANO	Burundi	IV
BUN/13/2016*	OM817516	bovine	SCIENSANO	Burundi	IV
BUN/9/2016*	OM817512	bovine	SCIENSANO	Burundi	IV
BUN/8/2016*	OM817511	bovine	SCIENSANO	Burundi	IV
BUN/1/2016*	OM817504	bovine	SCIENSANO	Burundi	IV
BUN/3/2016*	OM817506	bovine	SCIENSANO	Burundi	IV
BUN/2/2016*	OM817505	bovine	SCIENSANO	Burundi	IV
NAK-026-P/UGA/2016*	MH367435	cattle	PIADC	Uganda	IV
NAK-037-P/UGA/2016*	MH367436	cattle	PIADC	Uganda	IV
KEN/PRB80/2016 pro*	MH882657	African buffalo	PIADC	Kenya	IV
KEN/PRB87/2016 pro*	MH882662	African buffalo	PIADC	Kenya	IV
KEN/PRB66/2016 pro*	MH882648	African buffalo	PIADC	Kenya	IV
KEN/PRB83/2016 pro*	MH882659	African buffalo	PIADC	Kenya	IV
KEN/PRB85/2016 pro*	MH882660	African buffalo	PIADC	Kenya	IV
KEN/PRB86/2016 pro*	MH882661	African buffalo	PIADC	Kenya	IV
KEN/PRB81/2016 pro*	MH882658	African buffalo	PIADC	Kenya	IV
K120/04*	HM623700	n/a	n/a	Kenya	IV
TAN/18/2004	KF561725	cattle	WRLFMD	Tanzania	IV
KEN/32/2004	n/a	cattle	WRLFMD	Kenya	IV
K13/87*	HM623687	n/a	Makerere University	Kenya	IV
KEN/22/2004	n/a	cattle	WRLFMD	Kenya	IV
TAN/21/2004	KF561726	cattle	WRLFMD	Tanzania	IV
KEN/8/2005	n/a	cattle	WRLFMD	Kenya	IV
KEN/5/2004	n/a	cattle	WRLFMD	Kenya	IV
TAN/6/2004	KF561723	cattle	WRLFMD	Tanzania	IV
KEN/10/2004	n/a	cattle	WRLFMD	Kenya	IV
TAN/9/2004	KF561724	cattle	WRLFMD	Tanzania	IV
TAN/4/2004	KF561722	cattle	WRLFMD	Tanzania	IV

continued on next page

label	accession	host(s)	lab	country	taxonomic information
KEN/13/2004	n/a	cattle	WRLFMD	Kenya	IV
KEN/17/2004	n/a	cattle	WRLFMD	Kenya	IV
KEN/6/2004	n/a	cattle	WRLFMD	Kenya	IV
K37/86*	HM623686	n/a	Makerere University	Kenya	IV
KEN/21/2008	n/a	cattle	WRLFMD	Kenya	IV
KEN/18/2008	n/a	cattle	WRLFMD	Kenya	IV
KEN/19/2008	n/a	cattle	WRLFMD	Kenya	IV
K59/07*	HM623708	n/a	n/a	Kenya	IV
KEN/13/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/22/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/14/2007	n/a	cattle	WRLFMD	Kenya	IV
K15/07*	HM623704	n/a	n/a	Kenya	IV
K17/07*	HM623705	n/a	n/a	Kenya	IV
K20/07*	HM623706	n/a	n/a	Kenya	IV
KEN/4/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/9/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/23/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/16/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/8/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/7/2007	n/a	cattle	WRLFMD	Kenya	IV
K42/07*	HM623707	n/a	n/a	Kenya	IV
KEN/2/2007	n/a	cattle	WRLFMD	Kenya	IV
K12/07*	HM623703	n/a	n/a	Kenya	IV
K67/07*	HM623709	n/a	n/a	Kenya	IV
KEN/31/2008	n/a	cattle	WRLFMD	Kenya	IV
KEN/2/2008	n/a	cattle	WRLFMD	Kenya	IV
K49/99*	HM623698	n/a	Makerere University	Kenya	IV
KEN/19/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/5/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/10/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/11/2007	n/a	cattle	WRLFMD	Kenya	IV
KEN/K137/2014*	MH882612	cattle	PIADC	Kenya	IV
KEN/K39/2015*	MH882613	cattle	PIADC	Kenya	IV
KEN/PRB39/2016 pro*	MH882628	African buffalo	PIADC	Kenya	IV
KEN/PRB62/2016 pro*	MH882645	African buffalo	PIADC	Kenya	IV
KEN/PRB59/2016 pro*	MH882642	African buffalo	PIADC	Kenya	IV
KEN/PRB58/2016 pro*	MH882641	African buffalo	PIADC	Kenya	IV
KEN/PRB61/2016 pro*	MH882644	African buffalo	PIADC	Kenya	IV
KEN/PRB52/2016 pro*	MH882638	African buffalo	PIADC	Kenya	IV
KEN/PRB60/2016 pro*	MH882643	African buffalo	PIADC	Kenya	IV
KEN/PRB6/2016 pro*	MH882615	African buffalo	PIADC	Kenya	IV
ETH/1/90	AY343935	bovine	OVI	Ethiopia	IV
KEN/1/84	AY344505	bovine	OVI	Kenya	IV
RHO/1/48	AY593847	n/a	PIADC	Rhodesia	III
BOT/P3/98 VUM-29*	AF367124	African buffalo	OVI	Botswana	III
MAL/1/2003	n/a	bovine	WRLFMD	Malawi	I
ZIM/14/2002	KF219689	bovine	WRLFMD	Zimbabwe	I
SA/106/59	AY593848	n/a	PIADC	South Africa (SA)	I
ZIM/7/83*	AF136607	bovine	OVI	Zimbabwe	II
ZIM/5/81	EF134951	bovine	WRLFMD	Zimbabwe	II
SAU/6/2000	AF367135	bovine	OVI	Saudi Arabia	VII

*, not a WRLFMD Reference Number

n/a, not available