

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

Genotyping Report

Date: 18 June 2010

FMDV type SAT 1

Country: Kenya

Period: 2009-2010

No. of isolates: 19

BATCH: WRLFMD/2010/00021



The contents of this report are copyright and should not be reproduced without permission

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/121/2009 Batch No: WRLFMD/2010/00021 Sender Ref: K119/09 Location: Michigan, Nakuru North, Rift Valley, Kenya Date collected: 30/10/2009 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN09121.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/104/2009	KEN09104	663	656	0	98.94	1.06	I (NWZ)	unnamed
2	SAT1/T155/71	TAN71155	663	598	0	90.20	9.80	I (NWZ)	unnamed
3	SAT1/KEN/21/2004	KEN04-21	663	597	0	90.05	9.95	I (NWZ)	unnamed
4	SAT1/KEN/75/2010	KEN10-75	663	597	0	90.05	9.95	I (NWZ)	Unnamed
5	SAT1/TAN/5/96	TAN96-05	663	597	0	90.05	9.95	I (NWZ)	unnamed
6	SAT1/TAN/5/96 (AY442007)	TAN96S05	663	597	0	90.05	9.95	I (NWZ)	unnamed
7	SAT1/TAN/2/71	TAN71-02	663	595	0	89.74	10.26	I (NWZ)	unnamed
8	SAT1/TAN/21/99	TAN99-21	663	591	0	89.14	10.86	I (NWZ)	unnamed
9	SAT1/TAN/51/99	TAN99-51	663	590	0	88.99	11.01	I (NWZ)	unnamed
10	SAT1/KEN/1/2010	KEN10-01	663	589	0	88.84	11.16	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	598	0	90.20	9.80	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	534	0	80.54	19.46	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	518	0	78.13	21.87	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	507	0	76.47	23.53	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	503	0	75.87	24.13	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	499	0	75.26	24.74	IV (EA-1)	unnamed
7	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	487	0	73.45	26.55	III (WZ)	unnamed
8	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	485	0	73.15	26.85	III (WZ)	unnamed
9	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	477	0	71.95	28.05	VII (EA-2)	unnamed
10	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	469	0	70.74	29.26	VIII (EA-3)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/123/2009 Batch No: WRLFMD/2010/00021 Sender Ref: K123/09 Location: Chapa Chura, Naivasha, Rift Valley, Kenya Date collected: 01/01/2009 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN09123.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/2/2009	KEN09-02	663	651	0	98.19	1.81	I (NWZ)	unnamed
2	SAT1/KEN/12/2009	KEN09-12	663	648	0	97.74	2.26	I (NWZ)	unnamed
3	SAT1/KEN/4/98 (AY441993)	KEN98S04	663	594	0	89.59	10.41	I (NWZ)	unnamed
4	SAT1/KEN/9/91 (AY441995)	KEN91S09	663	594	0	89.59	10.41	I (NWZ)	unnamed
5	SAT1/KEN/5/98 (DQ009721)	KEN98M05	657	588	0	89.50	10.50	I (NWZ)	unnamed
6	SAT1/KEN/11/91 (AY441994)	KEN91S11	663	593	0	89.44	10.56	I (NWZ)	unnamed
7	SAT1/T155/71	TAN71155	663	592	0	89.29	10.71	I (NWZ)	unnamed
8	SAT1/KEN/21/2004	KEN04-21	663	591	0	89.14	10.86	I (NWZ)	unnamed
9	SAT1/KEN/75/2010	KEN10-75	663	591	0	89.14	10.86	I (NWZ)	Unnamed
10	SAT1/TAN/5/96	TAN96-05	663	591	0	89.14	10.86	I (NWZ)	unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	592	0	89.29	10.71	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	530	0	79.94	20.06	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	503	0	75.87	24.13	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	502	0	75.72	24.28	VI	unnamed
5	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	497	0	74.96	25.04	IV (EA-1)	unnamed
6	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	492	0	74.21	25.79	II (SEZ)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	482	0	72.70	27.30	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	481	0	72.55	27.45	III (WZ)	unnamed
9	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	474	0	71.49	28.51	VII (EA-2)	unnamed
10	SAT1/ISR/4/62 (AY593844)	ISR62-04	663	467	0	70.44	29.56	VI	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1	Report date: 16/06/2010
WRLFMD Ref No: KEN/1/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00021	Checked by: D.P. King
Sender Ref: K1/10	
Location: Maragwa Town, Muranga, Central, Kenya	Topotype: I (NWZ)
Date collected: 04/01/2010	Genotype/strain: Unnamed
Date received by WRLFMD: 06/04/2010	Sequence filename: KEN10-01.SEQ
Date received for sequencing: 27/05/2010	Date sequence last updated: 16/06/2010
Species: Cattle	No. of Nt determined: 663
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 663
RT-PCR primers: SAT1-1C559F/SAT-2B208R	Total no. of comparisons: 412
SAT1U-OS/SAT-2B208R	Min. no. of nt for comparison: 300
	Total turn-around time: 71 days
	Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/4/2010	KEN10-04	663	663	0	100.00	0.00	I (NWZ)	Unnamed
2	SAT1/KEN/5/2010	KEN10-05	663	663	0	100.00	0.00	I (NWZ)	Unnamed
3	SAT1/KEN/6/2010	KEN10-06	663	663	0	100.00	0.00	I (NWZ)	Unnamed
4	SAT1/KEN/8/2010	KEN10-08	663	663	0	100.00	0.00	I (NWZ)	Unnamed
5	SAT1/KEN/10/2010	KEN10-10	663	662	0	99.85	0.15	I (NWZ)	Unnamed
6	SAT1/KEN/12/2010	KEN10-12	663	661	0	99.70	0.30	I (NWZ)	Unnamed
7	SAT1/KEN/13/2010	KEN10-13	663	661	0	99.70	0.30	I (NWZ)	Unnamed
8	SAT1/KEN/14/2010	KEN10-14	663	661	0	99.70	0.30	I (NWZ)	Unnamed
9	SAT1/KEN/78/2010	KEN10-78	663	661	0	99.70	0.30	I (NWZ)	Unnamed
10	SAT1/KEN/80/2010	KEN10-80	663	661	0	99.70	0.30	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	600	0	90.50	9.50	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	532	0	80.24	19.76	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	513	0	77.38	22.62	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	511	0	77.07	22.93	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	501	0	75.57	24.43	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	491	0	74.06	25.94	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	485	0	73.15	26.85	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	471	0	71.04	28.96	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	470	0	70.89	29.11	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/3/2010 Batch No: WRLFMD/2010/00021 Sender Ref: K3/10 Location: Kasarani, Kenya Date collected: 08/01/2010 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy2 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN10-03.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	660	0	99.55	0.45	I (NWZ)	Unnamed
2	SAT1/KEN/4/2010	KEN10-04	663	660	0	99.55	0.45	I (NWZ)	Unnamed
3	SAT1/KEN/5/2010	KEN10-05	663	660	0	99.55	0.45	I (NWZ)	Unnamed
4	SAT1/KEN/6/2010	KEN10-06	663	660	0	99.55	0.45	I (NWZ)	Unnamed
5	SAT1/KEN/8/2010	KEN10-08	663	660	0	99.55	0.45	I (NWZ)	Unnamed
6	SAT1/KEN/10/2010	KEN10-10	663	659	0	99.40	0.60	I (NWZ)	Unnamed
7	SAT1/KEN/12/2010	KEN10-12	663	658	0	99.25	0.75	I (NWZ)	Unnamed
8	SAT1/KEN/13/2010	KEN10-13	663	658	0	99.25	0.75	I (NWZ)	Unnamed
9	SAT1/KEN/14/2010	KEN10-14	663	658	0	99.25	0.75	I (NWZ)	Unnamed
10	SAT1/KEN/78/2010	KEN10-78	663	658	0	99.25	0.75	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	597	0	90.05	9.95	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	529	0	79.79	20.21	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	513	0	77.38	22.62	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	511	0	77.07	22.93	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	510	0	76.92	23.08	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	498	0	75.11	24.89	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	489	0	73.76	26.24	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	486	0	73.30	26.70	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	471	0	71.04	28.96	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	468	0	70.59	29.41	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1	Report date: 16/06/2010
WRLFMD Ref No: KEN/4/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00021	Checked by: D.P. King
Sender Ref: K8/10	
Location: Klangari, Kandara, Central, Kenya	Topotype: I (NWZ)
Date collected: 15/01/2010	Genotype/strain: Unnamed
Date received by WRLFMD: 06/04/2010	Sequence filename: KEN10-04.SEQ
Date received for sequencing: 27/05/2010	Date sequence last updated: 16/06/2010
Species: Hartebeest	No. of Nt determined: 663
Material used: BTy2	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 663
RT-PCR primers: SAT1-1C559F/SAT-2B208R	Total no. of comparisons: 412
SAT1U-OS/SAT-2B208R	Min. no. of nt for comparison: 300
	Total turn-around time: 71 days
	Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	663	0	100.00	0.00	I (NWZ)	Unnamed
2	SAT1/KEN/5/2010	KEN10-05	663	663	0	100.00	0.00	I (NWZ)	Unnamed
3	SAT1/KEN/6/2010	KEN10-06	663	663	0	100.00	0.00	I (NWZ)	Unnamed
4	SAT1/KEN/8/2010	KEN10-08	663	663	0	100.00	0.00	I (NWZ)	Unnamed
5	SAT1/KEN/10/2010	KEN10-10	663	662	0	99.85	0.15	I (NWZ)	Unnamed
6	SAT1/KEN/12/2010	KEN10-12	663	661	0	99.70	0.30	I (NWZ)	Unnamed
7	SAT1/KEN/13/2010	KEN10-13	663	661	0	99.70	0.30	I (NWZ)	Unnamed
8	SAT1/KEN/14/2010	KEN10-14	663	661	0	99.70	0.30	I (NWZ)	Unnamed
9	SAT1/KEN/78/2010	KEN10-78	663	661	0	99.70	0.30	I (NWZ)	Unnamed
10	SAT1/KEN/80/2010	KEN10-80	663	661	0	99.70	0.30	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	600	0	90.50	9.50	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	532	0	80.24	19.76	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	513	0	77.38	22.62	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	511	0	77.07	22.93	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	501	0	75.57	24.43	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	491	0	74.06	25.94	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	485	0	73.15	26.85	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	471	0	71.04	28.96	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	470	0	70.89	29.11	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1	Report date: 16/06/2010
WRLFMD Ref No: KEN/5/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00021	Checked by: D.P. King
Sender Ref: K9/10	
Location: Maragwa Town, Muranga, Central, Kenya	Topotype: I (NWZ)
Date collected: 15/01/2010	Genotype/strain: Unnamed
Date received by WRLFMD: 06/04/2010	Sequence filename: KEN10-05.SEQ
Date received for sequencing: 27/05/2010	Date sequence last updated: 16/06/2010
Species: Cattle	No. of Nt determined: 663
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 663
RT-PCR primers: SAT1-1C559F/SAT-2B208R	Total no. of comparisons: 412
SAT1U-OS/SAT-2B208R	Min. no. of nt for comparison: 300
	Total turn-around time: 71 days
	Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	663	0	100.00	0.00	I (NWZ)	Unnamed
2	SAT1/KEN/4/2010	KEN10-04	663	663	0	100.00	0.00	I (NWZ)	Unnamed
3	SAT1/KEN/6/2010	KEN10-06	663	663	0	100.00	0.00	I (NWZ)	Unnamed
4	SAT1/KEN/8/2010	KEN10-08	663	663	0	100.00	0.00	I (NWZ)	Unnamed
5	SAT1/KEN/10/2010	KEN10-10	663	662	0	99.85	0.15	I (NWZ)	Unnamed
6	SAT1/KEN/12/2010	KEN10-12	663	661	0	99.70	0.30	I (NWZ)	Unnamed
7	SAT1/KEN/13/2010	KEN10-13	663	661	0	99.70	0.30	I (NWZ)	Unnamed
8	SAT1/KEN/14/2010	KEN10-14	663	661	0	99.70	0.30	I (NWZ)	Unnamed
9	SAT1/KEN/78/2010	KEN10-78	663	661	0	99.70	0.30	I (NWZ)	Unnamed
10	SAT1/KEN/80/2010	KEN10-80	663	661	0	99.70	0.30	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	600	0	90.50	9.50	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	532	0	80.24	19.76	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	513	0	77.38	22.62	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	511	0	77.07	22.93	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	501	0	75.57	24.43	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	491	0	74.06	25.94	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	485	0	73.15	26.85	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	471	0	71.04	28.96	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	470	0	70.89	29.11	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/6/2010 Batch No: WRLFMD/2010/00021 Sender Ref: K10/10 Location: Thika, Central, Kenya Date collected: 15/01/2010 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN10-06.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	663	0	100.00	0.00	I (NWZ)	Unnamed
2	SAT1/KEN/4/2010	KEN10-04	663	663	0	100.00	0.00	I (NWZ)	Unnamed
3	SAT1/KEN/5/2010	KEN10-05	663	663	0	100.00	0.00	I (NWZ)	Unnamed
4	SAT1/KEN/8/2010	KEN10-08	663	663	0	100.00	0.00	I (NWZ)	Unnamed
5	SAT1/KEN/10/2010	KEN10-10	663	662	0	99.85	0.15	I (NWZ)	Unnamed
6	SAT1/KEN/12/2010	KEN10-12	663	661	0	99.70	0.30	I (NWZ)	Unnamed
7	SAT1/KEN/13/2010	KEN10-13	663	661	0	99.70	0.30	I (NWZ)	Unnamed
8	SAT1/KEN/14/2010	KEN10-14	663	661	0	99.70	0.30	I (NWZ)	Unnamed
9	SAT1/KEN/78/2010	KEN10-78	663	661	0	99.70	0.30	I (NWZ)	Unnamed
10	SAT1/KEN/80/2010	KEN10-80	663	661	0	99.70	0.30	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	600	0	90.50	9.50	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	532	0	80.24	19.76	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	513	0	77.38	22.62	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	511	0	77.07	22.93	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	501	0	75.57	24.43	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	491	0	74.06	25.94	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	485	0	73.15	26.85	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	471	0	71.04	28.96	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	470	0	70.89	29.11	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1	Report date: 16/06/2010
WRLFMD Ref No: KEN/10/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00021	Checked by: D.P. King
Sender Ref: K20/10	
Location: Kamiti, Klambu E, Central, Kenya	Topotype: I (NWZ)
Date collected: 20/01/2010	Genotype/strain: Unnamed
Date received by WRLFMD: 06/04/2010	Sequence filename: KEN10-10.SEQ
Date received for sequencing: 27/05/2010	Date sequence last updated: 16/06/2010
Species: Cattle	No. of Nt determined: 663
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 663
RT-PCR primers: SAT1-1C559F/SAT-2B208R	Total no. of comparisons: 412
SAT1U-OS/SAT-2B208R	Min. no. of nt for comparison: 300
	Total turn-around time: 71 days
	Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	662	0	99.85	0.15	I (NWZ)	Unnamed
2	SAT1/KEN/4/2010	KEN10-04	663	662	0	99.85	0.15	I (NWZ)	Unnamed
3	SAT1/KEN/5/2010	KEN10-05	663	662	0	99.85	0.15	I (NWZ)	Unnamed
4	SAT1/KEN/6/2010	KEN10-06	663	662	0	99.85	0.15	I (NWZ)	Unnamed
5	SAT1/KEN/8/2010	KEN10-08	663	662	0	99.85	0.15	I (NWZ)	Unnamed
6	SAT1/KEN/12/2010	KEN10-12	663	660	0	99.55	0.45	I (NWZ)	Unnamed
7	SAT1/KEN/13/2010	KEN10-13	663	660	0	99.55	0.45	I (NWZ)	Unnamed
8	SAT1/KEN/14/2010	KEN10-14	663	660	0	99.55	0.45	I (NWZ)	Unnamed
9	SAT1/KEN/78/2010	KEN10-78	663	660	0	99.55	0.45	I (NWZ)	Unnamed
10	SAT1/KEN/80/2010	KEN10-80	663	660	0	99.55	0.45	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	599	0	90.35	9.65	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	533	0	80.39	19.61	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	513	0	77.38	22.62	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	512	0	77.22	22.78	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	510	0	76.92	23.08	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	502	0	75.72	24.28	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	490	0	73.91	26.09	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	484	0	73.00	27.00	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	472	0	71.19	28.81	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	469	0	70.74	29.26	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/13/2010 Batch No: WRLFMD/2010/00021 Sender Ref: K25/10 Location: Embu, Kenya Date collected: 30/01/2010 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN10-13.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/12/2010	KEN10-12	663	663	0	100.00	0.00	I (NWZ)	Unnamed
2	SAT1/KEN/71/2010	KEN10-71	663	662	0	99.85	0.15	I (NWZ)	Unnamed
3	SAT1/KEN/1/2010	KEN10-01	663	661	0	99.70	0.30	I (NWZ)	Unnamed
4	SAT1/KEN/4/2010	KEN10-04	663	661	0	99.70	0.30	I (NWZ)	Unnamed
5	SAT1/KEN/5/2010	KEN10-05	663	661	0	99.70	0.30	I (NWZ)	Unnamed
6	SAT1/KEN/6/2010	KEN10-06	663	661	0	99.70	0.30	I (NWZ)	Unnamed
7	SAT1/KEN/76/2010	KEN10-76	663	661	0	99.70	0.30	I (NWZ)	Unnamed
8	SAT1/KEN/8/2010	KEN10-08	663	661	0	99.70	0.30	I (NWZ)	Unnamed
9	SAT1/KEN/10/2010	KEN10-10	663	660	0	99.55	0.45	I (NWZ)	Unnamed
10	SAT1/KEN/72/2010	KEN10-72	663	660	0	99.55	0.45	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	600	0	90.50	9.50	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	532	0	80.24	19.76	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	512	0	77.22	22.78	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	511	0	77.07	22.93	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	500	0	75.41	24.59	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	491	0	74.06	25.94	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	485	0	73.15	26.85	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	470	0	70.89	29.11	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	470	0	70.89	29.11	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1	Report date: 16/06/2010
WRLFMD Ref No: KEN/71/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00021	Checked by: D.P. King
Sender Ref: K38/10	
Location: Gaciriro, Mukurweini, Central, Kenya	Topotype: I (NWZ)
Date collected: 21/02/2010	Genotype/strain: Unnamed
Date received by WRLFMD: 06/04/2010	Sequence filename: KEN10-71.SEQ
Date received for sequencing: 27/05/2010	Date sequence last updated: 16/06/2010
Species: Cattle	No. of Nt determined: 663
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 663
RT-PCR primers: SAT1-1C559F/SAT-2B208R	Total no. of comparisons: 412
SAT1U-OS/SAT-2B208R	Min. no. of nt for comparison: 300
	Total turn-around time: 71 days
	Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/12/2010	KEN10-12	663	662	0	99.85	0.15	I (NWZ)	Unnamed
2	SAT1/KEN/13/2010	KEN10-13	663	662	0	99.85	0.15	I (NWZ)	Unnamed
3	SAT1/KEN/1/2010	KEN10-01	663	660	0	99.55	0.45	I (NWZ)	Unnamed
4	SAT1/KEN/4/2010	KEN10-04	663	660	0	99.55	0.45	I (NWZ)	Unnamed
5	SAT1/KEN/5/2010	KEN10-05	663	660	0	99.55	0.45	I (NWZ)	Unnamed
6	SAT1/KEN/6/2010	KEN10-06	663	660	0	99.55	0.45	I (NWZ)	Unnamed
7	SAT1/KEN/76/2010	KEN10-76	663	660	0	99.55	0.45	I (NWZ)	Unnamed
8	SAT1/KEN/8/2010	KEN10-08	663	660	0	99.55	0.45	I (NWZ)	Unnamed
9	SAT1/KEN/10/2010	KEN10-10	663	659	0	99.40	0.60	I (NWZ)	Unnamed
10	SAT1/KEN/72/2010	KEN10-72	663	659	0	99.40	0.60	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	599	0	90.35	9.65	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	531	0	80.09	19.91	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	513	0	77.38	22.62	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	511	0	77.07	22.93	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	510	0	76.92	23.08	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	499	0	75.26	24.74	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	490	0	73.91	26.09	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	484	0	73.00	27.00	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	469	0	70.74	29.26	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	469	0	70.74	29.26	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/72/2010 Batch No: WRLFMD/2010/00021 Sender Ref: K39/10 Location: UIOIN, Central, Kenya Date collected: 24/02/2010 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN10-72.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	660	0	99.55	0.45	I (NWZ)	Unnamed
2	SAT1/KEN/12/2010	KEN10-12	663	660	0	99.55	0.45	I (NWZ)	Unnamed
3	SAT1/KEN/13/2010	KEN10-13	663	660	0	99.55	0.45	I (NWZ)	Unnamed
4	SAT1/KEN/4/2010	KEN10-04	663	660	0	99.55	0.45	I (NWZ)	Unnamed
5	SAT1/KEN/5/2010	KEN10-05	663	660	0	99.55	0.45	I (NWZ)	Unnamed
6	SAT1/KEN/6/2010	KEN10-06	663	660	0	99.55	0.45	I (NWZ)	Unnamed
7	SAT1/KEN/8/2010	KEN10-08	663	660	0	99.55	0.45	I (NWZ)	Unnamed
8	SAT1/KEN/10/2010	KEN10-10	663	659	0	99.40	0.60	I (NWZ)	Unnamed
9	SAT1/KEN/71/2010	KEN10-71	663	659	0	99.40	0.60	I (NWZ)	Unnamed
10	SAT1/KEN/14/2010	KEN10-14	663	658	0	99.25	0.75	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	598	0	90.20	9.80	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	531	0	80.09	19.91	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	513	0	77.38	22.62	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	511	0	77.07	22.93	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	510	0	76.92	23.08	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	500	0	75.41	24.59	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	492	0	74.21	25.79	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	484	0	73.00	27.00	III (WZ)	unnamed
9	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	470	0	70.89	29.11	VII (EA-2)	unnamed
10	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	469	0	70.74	29.26	VIII (EA-3)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/76/2010 Batch No: WRLFMD/2010/00021 Sender Ref: K44/10 Location: Togomin, Sotik, Rift Valley, Kenya Date collected: 04/03/2010 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN10-76.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/12/2010	KEN10-12	663	661	0	99.70	0.30	I (NWZ)	Unnamed
2	SAT1/KEN/13/2010	KEN10-13	663	661	0	99.70	0.30	I (NWZ)	Unnamed
3	SAT1/KEN/71/2010	KEN10-71	663	660	0	99.55	0.45	I (NWZ)	Unnamed
4	SAT1/KEN/1/2010	KEN10-01	663	659	0	99.40	0.60	I (NWZ)	Unnamed
5	SAT1/KEN/4/2010	KEN10-04	663	659	0	99.40	0.60	I (NWZ)	Unnamed
6	SAT1/KEN/5/2010	KEN10-05	663	659	0	99.40	0.60	I (NWZ)	Unnamed
7	SAT1/KEN/6/2010	KEN10-06	663	659	0	99.40	0.60	I (NWZ)	Unnamed
8	SAT1/KEN/8/2010	KEN10-08	663	659	0	99.40	0.60	I (NWZ)	Unnamed
9	SAT1/KEN/10/2010	KEN10-10	663	658	0	99.25	0.75	I (NWZ)	Unnamed
10	SAT1/KEN/72/2010	KEN10-72	663	658	0	99.25	0.75	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	599	0	90.35	9.65	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	531	0	80.09	19.91	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	513	0	77.38	22.62	II (SEZ)	unnamed
5	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	512	0	77.22	22.78	VI	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	498	0	75.11	24.89	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	492	0	74.21	25.79	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	487	0	73.45	26.55	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	469	0	70.74	29.26	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	469	0	70.74	29.26	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: SAT1 WRLFMD Ref No: KEN/80/2010 Batch No: WRLFMD/2010/00021 Sender Ref: K50/10 Location: Kingori, Thamura, Gatanga, Kenya Date collected: 15/03/2010 Date received by WRLFMD: 06/04/2010 Date received for sequencing: 27/05/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: SAT1-1C559F/SAT-2B208R SAT1U-OS/SAT-2B208R	Report date: 16/06/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: I (NWZ) Genotype/strain: Unnamed Sequence filename: KEN10-80.SEQ Date sequence last updated: 16/06/2010 No. of Nt determined: 663 No. of ambiguities: 0 Gene length: 663 Total no. of comparisons: 412 Min. no. of nt for comparison: 300 Total turn-around time: 71 days Sequencing time: 20 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/KEN/1/2010	KEN10-01	663	661	0	99.70	0.30	I (NWZ)	Unnamed
2	SAT1/KEN/4/2010	KEN10-04	663	661	0	99.70	0.30	I (NWZ)	Unnamed
3	SAT1/KEN/5/2010	KEN10-05	663	661	0	99.70	0.30	I (NWZ)	Unnamed
4	SAT1/KEN/6/2010	KEN10-06	663	661	0	99.70	0.30	I (NWZ)	Unnamed
5	SAT1/KEN/8/2010	KEN10-08	663	661	0	99.70	0.30	I (NWZ)	Unnamed
6	SAT1/KEN/10/2010	KEN10-10	663	660	0	99.55	0.45	I (NWZ)	Unnamed
7	SAT1/KEN/12/2010	KEN10-12	663	659	0	99.40	0.60	I (NWZ)	Unnamed
8	SAT1/KEN/13/2010	KEN10-13	663	659	0	99.40	0.60	I (NWZ)	Unnamed
9	SAT1/KEN/14/2010	KEN10-14	663	659	0	99.40	0.60	I (NWZ)	Unnamed
10	SAT1/KEN/78/2010	KEN10-78	663	659	0	99.40	0.60	I (NWZ)	Unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT1/T155/71	TAN71155	663	600	0	90.50	9.50	I (NWZ)	unnamed
2	SAT1/ZIM/23/2003	ZIM03-23	663	534	0	80.54	19.46	I (NWZ)	unnamed
3	SAT1/RV/11/37 (AY593839)	RHO37-11	663	514	0	77.53	22.47	II (SEZ)	unnamed
4	SAT1/SUD/3/76 (AY441996)	SUD76S03	663	513	0	77.38	22.62	VI	unnamed
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	509	0	76.77	23.23	II (SEZ)	unnamed
6	SAT1/UGA BUFF/21/70 buffalo	UGA70-21	663	500	0	75.41	24.59	IV (EA-1)	unnamed
7	SAT1/BOT/1/68 (AY593845)	BOT68-C1	663	490	0	73.91	26.09	III (WZ)	unnamed
8	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	484	0	73.00	27.00	III (WZ)	unnamed
9	SAT1/UGA/1/97 (AY442012)	UGA97S01	663	471	0	71.04	28.96	VIII (EA-3)	unnamed
10	SAT1/UGA/13/74 (AY442010)	UGA74S13	663	471	0	71.04	28.96	VII (EA-2)	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

Report on FMDV SAT 1 in Kenya in 2008-2009

Batch: WRLFMD/2010/00021

Software: MEGA 4.0

No. of Taxa : 168

Data File : n:\levd\meg\db\fmdv\sat1\KEN2009c.meg

Data Title : SAT1 Kenya 2009-2010

Data Type : Nucleotide (Coding)

Analysis : Phylogeny reconstruction

Tree Inference : =====

->Method : Neighbor-Joining

->Phylogeny Test and options : Bootstrap (1000 replicates; seed=64238)

Include Sites : =====

->Gaps/Missing Data : Pairwise Deletion

->Codon Positions : 1st+2nd+3rd+Noncoding

Substitution Model : =====

->Model : Nucleotide: Kimura 2-parameter

->Substitutions to Include : d: Transitions + Transversions

->Pattern among Lineages : Same (Homogeneous)

->Rates among sites : Uniform rates

No. of Sites : 663

No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 18 June 2010

© Institute for Animal Health

