

Serotype: SAT1		Report date: 06/10/2006					
WRL Ref No: KEN/21/2004							
Sender Ref: K110/2004							
Date collected: 11/06/2004							
Date received by WRLFMD: 24/01/2006		Topotype: Northwest Zimbabwe (NWZ)					
Date received for sequencing: 08/02/2006		Genotype/strain: none designated					
Species: Cattle		Sequence filename: KEN04-21.SEQ					
Material used: BTy1		Date sequence last updated: 29/09/2006					
Region sequenced: VP1		Total no. of comparisons: 285					
RT-PCR primers: SAT1-1C559F/SAT-2B208R; SAT1U-OS/SAT-2B208R		Min. no. of nt for comparison: 300					
No. of Nt determined: 663		Total turn-around time: 255 days					
No. of ambiguities: 0		Sequencing time: 240 days					
Gene length: 663							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	662	0	99.85	0.15
2	SAT1/TAN/25/99	TAN99-25	315	287	16	91.11	8.89
3	SAT1/ZAM/P2/96 (LOC-25)	ZAW96-08	417	376	6	90.17	9.83
4	SAT1/KEN/24/2005	KEN05-24	663	597	0	90.05	9.95
5	SAT1/KEN/19/2005	KEN05-19	663	597	0	90.05	9.95
6	SAT1/KEN/10/2006	KEN06-10	663	597	0	90.05	9.95
7	SAT1/KEN/18/2005	KEN05-18	663	596	0	89.89	10.11
8	SAT1/KEN/17/2005	KEN05-17	663	596	0	89.89	10.11
9	SAT1/KEN/16/2005	KEN05-16	663	595	0	89.74	10.26
10	SAT1/KEN/11/2005	KEN05-11	663	595	0	89.74	10.26
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	662	0	99.85	0.15
2	SAT1/SAR/9/81	SAR81-09	629	490	11	77.9	22.1
3	SAT1/RV/11/37 AY593839	RHO37-11	663	510	0	76.92	23.08
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	510	0	76.92	23.08
5	SAT1/SA/2/58 AY593841	SAR58-02	663	499	0	75.26	24.74
6	SAT1/SA/13/61 AY593842	SAR61-13	663	497	0	74.96	25.04
7	SAT1/SWA/40/61 AY593843	SWA61-40	663	493	0	74.36	25.64
8	SAT1/BEC/1/48 AY593838	BEC48-01	663	492	0	74.21	25.79
9	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	488	0	73.6	26.4
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	467	0	70.44	29.56
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT1 Report date: 06/10/2006
WRL Ref No: KEN/11/2005
Sender Ref: K43/2005
Date collected: 15/07/2005
Date received by WRLFMD: 24/01/2006 Topotype: Northwest Zimbabwe (NWZ)
Date received for sequencing: 08/02/2006 Genotype/strain: none designated
Species: Cattle Sequence filename: KEN05-11.SEQ
Material used: BTy1 Date sequence last updated: 13/05/2006
Region sequenced: VP1 Total no. of comparisons: 285
RT-PCR primers: SAT1-1C559F/SAT-2B208R; Min. no. of nt for comparison: 300
Total turn-around time: 255 days
Sequencing time: 240 days
No. of Nt determined: 663
No. of ambiguities: 0
Gene length: 663

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/TAN/25/99	TAN99-25	315	300	16	95.24	4.76
2	SAT1/T155/71	TAN71155	663	596	0	89.89	10.11
3	SAT1/KEN/21/2004	KEN04-21	663	595	0	89.74	10.26
4	SAT1/KEN/24/2005	KEN05-24	663	591	0	89.14	10.86
5	SAT1/KEN/32/2005	KEN05-32	663	591	0	89.14	10.86
6	SAT1/KEN/19/2005	KEN05-19	663	591	0	89.14	10.86
7	SAT1/KEN/5/2006	KEN06-05	663	591	0	89.14	10.86
8	SAT1/KEN/10/2006	KEN06-10	663	591	0	89.14	10.86
9	SAT1/KEN/18/2005	KEN05-18	663	590	0	88.99	11.01
10	SAT1/KEN/13/2005	KEN05-13	663	590	0	88.99	11.01

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	596	0	89.89	10.11
2	SAT1/SAR/9/81	SAR81-09	629	482	11	76.63	23.37
3	SAT1/RV/11/37 AY593839	RHO37-11	663	502	0	75.72	24.28
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	500	0	75.41	24.59
5	SAT1/SA/13/61 AY593842	SAR61-13	663	494	0	74.51	25.49
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	493	0	74.36	25.64
7	SAT1/SA/2/58 AY593841	SAR58-02	663	486	0	73.3	26.7
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	484	0	73	27
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	481	0	72.55	27.45
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	456	0	68.78	31.22

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1	Report date: 06/10/2006						
WRL Ref No: KEN/13/2005							
Sender Ref: K47/2005							
Date collected: 19/07/2005							
Date received by WRLFMD: 24/01/2006	Topotype: Northwest Zimbabwe (NWZ)						
Date received for sequencing: 08/02/2006	Genotype/strain: none designated						
Species: Cattle	Sequence filename: KEN05-13.SEQ						
Material used: BTy1	Date sequence last updated: 28/09/2006						
Region sequenced: VP1	Total no. of comparisons: 285						
RT-PCR primers: SAT1U-OS/SAT-2B208R;	Min. no. of nt for comparison: 300						
SAT1-1C559F/SAT-2B208R	Total turn-around time: 255 days						
No. of Nt determined: 663	Sequencing time: 240 days						
No. of ambiguities: 0							
Gene length: 663							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/KEN/31/2005	KEN05-31	663	661	0	99.7	0.3
2	SAT1/KEN/17/2005	KEN05-17	663	654	0	98.64	1.36
3	SAT1/KEN/32/2005	KEN05-32	663	653	0	98.49	1.51
4	SAT1/KEN/19/2005	KEN05-19	663	653	0	98.49	1.51
5	SAT1/KEN/5/2006	KEN06-05	663	653	0	98.49	1.51
6	SAT1/KEN/18/2005	KEN05-18	663	652	0	98.34	1.66
7	SAT1/KEN/24/2005	KEN05-24	663	651	0	98.19	1.81
8	SAT1/KEN/16/2005	KEN05-16	663	651	0	98.19	1.81
9	SAT1/KEN/9/2006	KEN06-09	663	651	0	98.19	1.81
10	SAT1/KEN/10/2006	KEN06-10	663	651	0	98.19	1.81
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	595	0	89.74	10.26
2	SAT1/RV/11/37 AY593839	RHO37-11	663	515	0	77.68	22.32
3	SAT1/SAR/9/81	SAR81-09	629	486	11	77.27	22.73
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	510	0	76.92	23.08
5	SAT1/SA/2/58 AY593841	SAR58-02	663	504	0	76.02	23.98
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	503	0	75.87	24.13
7	SAT1/SA/13/61 AY593842	SAR61-13	663	501	0	75.57	24.43
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	499	0	75.26	24.74
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	490	0	73.91	26.09
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	466	0	70.29	29.71
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT1
WRL Ref No: KEN/16/2005
Sender Ref: K65/2005
Date collected: 25/11/2005
Date received by WRLFMD: 24/01/2006
Date received for sequencing: 08/02/2006
Species: Cattle
Material used: BTy1
Region sequenced: VP1
RT-PCR primers: SAT1U-OS/SAT-2B208R;
SAT1-1C559F/SAT-2B-208R
No. of Nt determined: 663
No. of ambiguities: 0
Gene length: 663

Report date: 06/10/2006
Topotype: Northwest Zimbabwe (NWZ)
Genotype/strain: none designated
Sequence filename: KEN05-16.SEQ
Date sequence last updated: 28/09/2006
Total no. of comparisons: 285
Min. no. of nt for comparison: 300
Total turn-around time: 255 days
Sequencing time: 240 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/KEN/18/2005	KEN05-18	663	660	0	99.55	0.45
2	SAT1/KEN/17/2005	KEN05-17	663	660	0	99.55	0.45
3	SAT1/KEN/19/2005	KEN05-19	663	659	0	99.4	0.6
4	SAT1/KEN/24/2005	KEN05-24	663	655	0	98.79	1.21
5	SAT1/KEN/9/2006	KEN06-09	663	655	0	98.79	1.21
6	SAT1/KEN/10/2006	KEN06-10	663	655	0	98.79	1.21
7	SAT1/KEN/32/2005	KEN05-32	663	651	0	98.19	1.81
8	SAT1/KEN/5/2006	KEN06-05	663	651	0	98.19	1.81
9	SAT1/KEN/13/2005	KEN05-13	663	651	0	98.19	1.81
10	SAT1/KEN/31/2005	KEN05-31	663	651	0	98.19	1.81

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	596	0	89.89	10.11
2	SAT1/RV/11/37 AY593839	RHO37-11	663	514	0	77.53	22.47
3	SAT1/SAR/9/81	SAR81-09	629	483	11	76.79	23.21
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	506	0	76.32	23.68
5	SAT1/SA/2/58 AY593841	SAR58-02	663	502	0	75.72	24.28
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	499	0	75.26	24.74
7	SAT1/SA/13/61 AY593842	SAR61-13	663	498	0	75.11	24.89
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	493	0	74.36	25.64
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	484	0	73	27
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	466	0	70.29	29.71

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1	Report date: 06/10/2006						
WRL Ref No: KEN/17/2005							
Sender Ref: K66/2005							
Date collected: 11/12/2005	Topotype: Northwest Zimbabwe (NWZ)						
Date received by WRLFMD: 24/01/2006	Genotype/strain: none designated						
Date received for sequencing: 08/02/2006	Sequence filename: KEN05-17.SEQ						
Species: Cattle	Date sequence last updated: 28/09/2006						
Material used: BTy2	Total no. of comparisons: 285						
Region sequenced: VP1	Min. no. of nt for comparison: 300						
RT-PCR primers: SAT1U-OS/SAT-2B208R; SAT1-1C559F/SAT-2B208R	Total turn-around time: 255 days						
No. of Nt determined: 663	Sequencing time: 240 days						
No. of ambiguities: 0							
Gene length: 663							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/KEN/19/2005	KEN05-19	663	662	0	99.85	0.15
2	SAT1/KEN/18/2005	KEN05-18	663	661	0	99.7	0.3
3	SAT1/KEN/16/2005	KEN05-16	663	660	0	99.55	0.45
4	SAT1/KEN/24/2005	KEN05-24	663	658	0	99.25	0.75
5	SAT1/KEN/9/2006	KEN06-09	663	658	0	99.25	0.75
6	SAT1/KEN/10/2006	KEN06-10	663	658	0	99.25	0.75
7	SAT1/KEN/32/2005	KEN05-32	663	654	0	98.64	1.36
8	SAT1/KEN/5/2006	KEN06-05	663	654	0	98.64	1.36
9	SAT1/KEN/13/2005	KEN05-13	663	654	0	98.64	1.36
10	SAT1/KEN/31/2005	KEN05-31	663	654	0	98.64	1.36
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	597	0	90.05	9.95
2	SAT1/RV/11/37 AY593839	RHO37-11	663	515	0	77.68	22.32
3	SAT1/SAR/9/81	SAR81-09	629	484	11	76.95	23.05
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	507	0	76.47	23.53
5	SAT1/SA/2/58 AY593841	SAR58-02	663	504	0	76.02	23.98
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	501	0	75.57	24.43
7	SAT1/SA/13/61 AY593842	SAR61-13	663	500	0	75.41	24.59
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	495	0	74.66	25.34
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	486	0	73.3	26.7
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	465	0	70.14	29.86
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT1
WRL Ref No: KEN/18/2005
Sender Ref: K67/2005
Date collected: 13/12/2005
Date received by WRLFMD: 24/01/2006
Date received for sequencing: 08/02/2006
Species: Cattle
Material used: BTy1
Region sequenced: VP1
RT-PCR primers: SAT1U-OS/SAT-2B208R;
SAT1-1C559F/SAT-2B-208R
No. of Nt determined: 663
No. of ambiguities: 0
Gene length: 663

Report date: 06/10/2006
Topotype: Northwest Zimbabwe (NWZ)
Genotype/strain: none designated
Sequence filename: KEN05-18.SEQ
Date sequence last updated: 28/09/2006
Total no. of comparisons: 285
Min. no. of nt for comparison: 300
Total turn-around time: 255 days
Sequencing time: 240 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/KEN/19/2005	KEN05-19	663	662	0	99.85	0.15
2	SAT1/KEN/17/2005	KEN05-17	663	661	0	99.7	0.3
3	SAT1/KEN/16/2005	KEN05-16	663	660	0	99.55	0.45
4	SAT1/KEN/24/2005	KEN05-24	663	656	0	98.94	1.06
5	SAT1/KEN/9/2006	KEN06-09	663	656	0	98.94	1.06
6	SAT1/KEN/10/2006	KEN06-10	663	656	0	98.94	1.06
7	SAT1/KEN/32/2005	KEN05-32	663	652	0	98.34	1.66
8	SAT1/KEN/5/2006	KEN06-05	663	652	0	98.34	1.66
9	SAT1/KEN/13/2005	KEN05-13	663	652	0	98.34	1.66
10	SAT1/KEN/31/2005	KEN05-31	663	652	0	98.34	1.66

Relationships to Reference Virus Strains

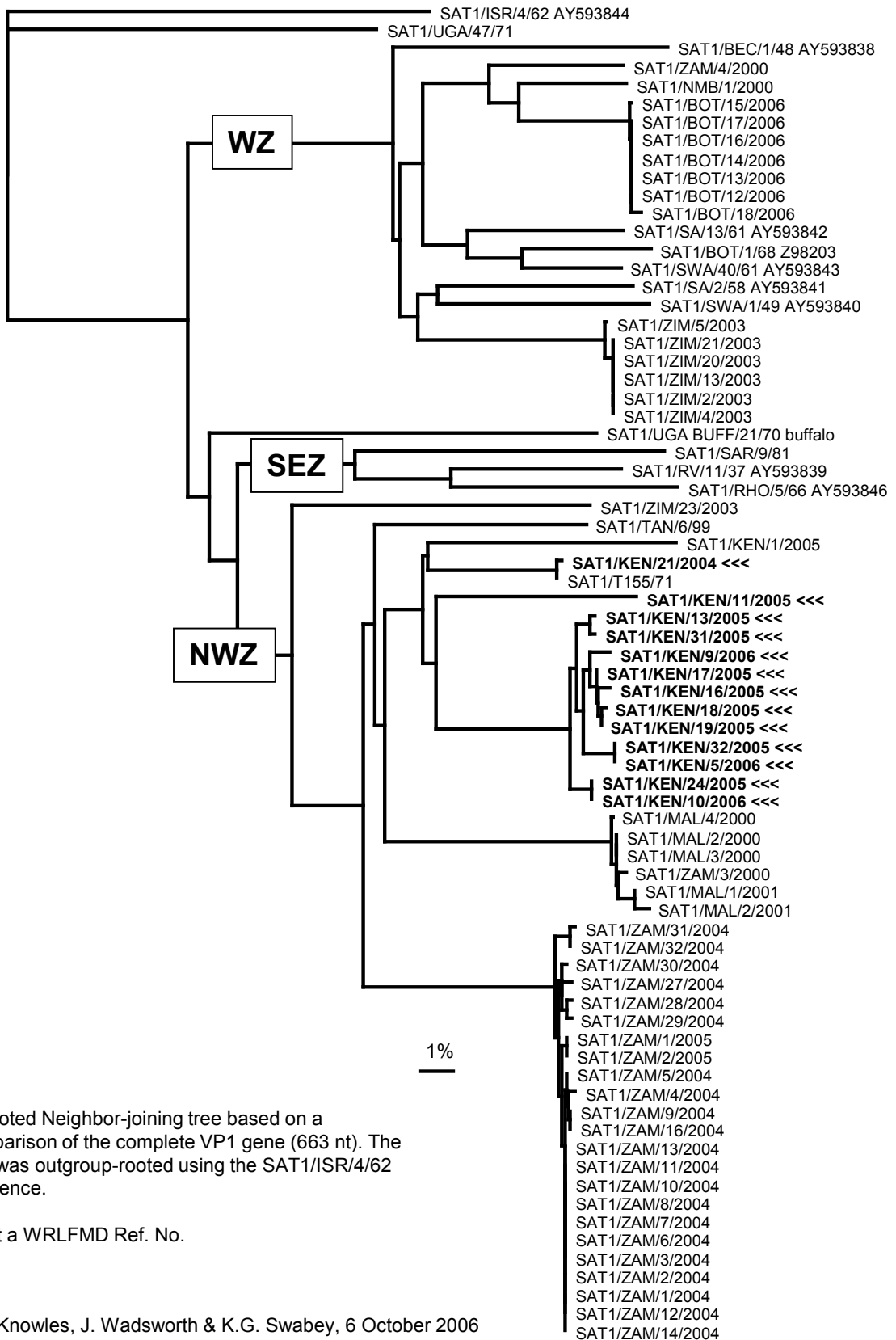
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	597	0	90.05	9.95
2	SAT1/RV/11/37 AY593839	RHO37-11	663	513	0	77.38	22.62
3	SAT1/SAR/9/81	SAR81-09	629	482	11	76.63	23.37
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	505	0	76.17	23.83
5	SAT1/SA/2/58 AY593841	SAR58-02	663	502	0	75.72	24.28
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	499	0	75.26	24.74
7	SAT1/SA/13/61 AY593842	SAR61-13	663	498	0	75.11	24.89
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	493	0	74.36	25.64
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	484	0	73	27
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	465	0	70.14	29.86

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1	Report date: 06/10/2006						
WRL Ref No: KEN/19/2005							
Sender Ref: K68/2005							
Date collected: 15/12/2005							
Date received by WRLFMD: 24/01/2006	Topotype: Northwest Zimbabwe (NWZ)						
Date received for sequencing: 08/02/2006	Genotype/strain: none designated						
Species: Cattle	Sequence filename: KEN05-19.SEQ						
Material used: BTy1	Date sequence last updated: 02/10/2006						
Region sequenced: VP1	Total no. of comparisons: 285						
RT-PCR primers: SAT1U-OS/SAT-2B208R;	Min. no. of nt for comparison: 300						
SAT1-1C559F/SAT-2B208R	Total turn-around time: 255 days						
No. of Nt determined: 663	Sequencing time: 240 days						
No. of ambiguities: 0							
Gene length: 663							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/KEN/17/2005	KEN05-17	663	662	0	99.85	0.15
2	SAT1/KEN/18/2005	KEN05-18	663	662	0	99.85	0.15
3	SAT1/KEN/16/2005	KEN05-16	663	659	0	99.4	0.6
4	SAT1/KEN/24/2005	KEN05-24	663	657	0	99.1	0.9
5	SAT1/KEN/9/2006	KEN06-09	663	657	0	99.1	0.9
6	SAT1/KEN/10/2006	KEN06-10	663	657	0	99.1	0.9
7	SAT1/KEN/32/2005	KEN05-32	663	653	0	98.49	1.51
8	SAT1/KEN/5/2006	KEN06-05	663	653	0	98.49	1.51
9	SAT1/KEN/13/2005	KEN05-13	663	653	0	98.49	1.51
10	SAT1/KEN/31/2005	KEN05-31	663	653	0	98.49	1.51
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	598	0	90.2	9.8
2	SAT1/RV/11/37 AY593839	RHO37-11	663	514	0	77.53	22.47
3	SAT1/SAR/9/81	SAR81-09	629	483	11	76.79	23.21
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	506	0	76.32	23.68
5	SAT1/SA/2/58 AY593841	SAR58-02	663	503	0	75.87	24.13
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	500	0	75.41	24.59
7	SAT1/SA/13/61 AY593842	SAR61-13	663	499	0	75.26	24.74
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	494	0	74.51	25.49
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	485	0	73.15	26.85
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	464	0	69.98	30.02
nt, nucleotides							
*, not a WRLFMD reference number							

Report on FMDV SAT 1 from Kenya, 2004-2006



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (663 nt). The tree was outgroup-rooted using the SAT1/ISR/4/62 sequence.

*, not a WRLFMD Ref. No.