

Serotype: SAT1
WRL Ref No: KEN/24/2005
Sender Ref: K28/2005
Date collected: 19/05/2005
Date received by WRLFMD: 26/05/2006
Date received for sequencing: 07/06/2006
Species: Cattle
Material used: BTy1
Region sequenced: VP1
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R
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: KEN05-24.SEQ
Date sequence last updated: 20/06/2006
Total no. of comparisons: 285
Min. no. of nt for comparison: 300
Total turn-around time: 133 days
Sequencing time: 121 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/10/2006	KEN06-10	663	663	0	100	0
2	SAT1/KEN/17/2005	KEN05-17	663	658	0	99.25	0.75
3	SAT1/KEN/19/2005	KEN05-19	663	657	0	99.1	0.9
4	SAT1/KEN/18/2005	KEN05-18	663	656	0	98.94	1.06
5	SAT1/KEN/9/2006	KEN06-09	663	655	0	98.79	1.21
6	SAT1/KEN/16/2005	KEN05-16	663	655	0	98.79	1.21
7	SAT1/KEN/13/2005	KEN05-13	663	651	0	98.19	1.81
8	SAT1/KEN/31/2005	KEN05-31	663	651	0	98.19	1.81
9	SAT1/KEN/32/2005	KEN05-32	663	649	0	97.89	2.11
10	SAT1/KEN/5/2006	KEN06-05	663	649	0	97.89	2.11

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	518	0	78.13	21.87
3	SAT1/SAR/9/81	SAR81-09	629	487	11	77.42	22.58
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	508	0	76.62	23.38
5	SAT1/SA/2/58 AY593841	SAR58-02	663	505	0	76.17	23.83
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	501	0	75.57	24.43
7	SAT1/SA/13/61 AY593842	SAR61-13	663	499	0	75.26	24.74
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	497	0	74.96	25.04
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	488	0	73.6	26.4
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	470	0	70.89	29.11

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1	Report date: 06/10/2006
WRL Ref No: KEN/31/2005	
Sender Ref: K57/2005	
Date collected: 19/09/2005	Topotype: Northwest Zimbabwe (NWZ)
Date received by WRLFMD: 26/05/2006	Genotype/strain: none designated
Date received for sequencing: 07/06/2006	Sequence filename: KEN05-31.SEQ
Species: Cattle	Date sequence last updated: 27/09/2006
Material used: BTy1	Total no. of comparisons: 285
Region sequenced: VP1	Min. no. of nt for comparison: 300
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R	Total turn-around time: 133 days
No. of Nt determined: 663	Sequencing time: 121 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/13/2005	KEN05-13	663	661	0	99.7	0.3
2	SAT1/KEN/17/2005	KEN05-17	663	654	0	98.64	1.36
3	SAT1/KEN/5/2006	KEN06-05	663	653	0	98.49	1.51
4	SAT1/KEN/32/2005	KEN05-32	663	653	0	98.49	1.51
5	SAT1/KEN/19/2005	KEN05-19	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	514	0	77.53	22.47
3	SAT1/SAR/9/81	SAR81-09	629	485	11	77.11	22.89
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	508	0	76.62	23.38
5	SAT1/SA/2/58 AY593841	SAR58-02	663	505	0	76.17	23.83
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	503	0	75.87	24.13
7	SAT1/SA/13/61 AY593842	SAR61-13	663	500	0	75.41	24.59
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	498	0	75.11	24.89
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/32/2005
Sender Ref: K59/2005
Date collected: 23/09/2005
Date received by WRLFMD: 26/05/2006
Date received for sequencing: 07/06/2006
Species: Cattle
Material used: BTy2
Region sequenced: VP1
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R
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: KEN05-32.SEQ
Date sequence last updated: 27/09/2006
Total no. of comparisons: 285
Min. no. of nt for comparison: 300
Total turn-around time: 133 days
Sequencing time: 121 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/5/2006	KEN06-05	663	663	0	100	0
2	SAT1/KEN/17/2005	KEN05-17	663	654	0	98.64	1.36
3	SAT1/KEN/19/2005	KEN05-19	663	653	0	98.49	1.51
4	SAT1/KEN/31/2005	KEN05-31	663	653	0	98.49	1.51
5	SAT1/KEN/13/2005	KEN05-13	663	653	0	98.49	1.51
6	SAT1/KEN/18/2005	KEN05-18	663	652	0	98.34	1.66
7	SAT1/KEN/16/2005	KEN05-16	663	651	0	98.19	1.81
8	SAT1/KEN/9/2006	KEN06-09	663	651	0	98.19	1.81
9	SAT1/KEN/24/2005	KEN05-24	663	649	0	97.89	2.11
10	SAT1/KEN/10/2006	KEN06-10	663	649	0	97.89	2.11

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	512	0	77.22	22.78
3	SAT1/SAR/9/81	SAR81-09	629	481	11	76.47	23.53
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	507	0	76.47	23.53
5	SAT1/SA/2/58 AY593841	SAR58-02	663	502	0	75.72	24.28
6	SAT1/SA/13/61 AY593842	SAR61-13	663	502	0	75.72	24.28
7	SAT1/SWA/40/61 AY593843	SWA61-40	663	499	0	75.26	24.74
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	493	0	74.36	25.64
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	487	0	73.45	26.55
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	460	0	69.38	30.62

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1	Report date: 06/10/2006
WRL Ref No: KEN/5/2006	
Sender Ref: K8/2006	
Date collected: 02/02/2006	
Date received by WRLFMD: 26/05/2006	Topotype: Northwest Zimbabwe (NWZ)
Date received for sequencing: 07/06/2006	Genotype/strain: none designated
Species: Cattle	Sequence filename: KEN06-05.SEQ
Material used: BTy1	Date sequence last updated: 27/09/2006
Region sequenced: VP1	Total no. of comparisons: 285
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 663	Total turn-around time: 133 days
No. of ambiguities: 0	Sequencing time: 121 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/KEN/32/2005	KEN05-32	663	663	0	100	0
2	SAT1/KEN/17/2005	KEN05-17	663	654	0	98.64	1.36
3	SAT1/KEN/19/2005	KEN05-19	663	653	0	98.49	1.51
4	SAT1/KEN/31/2005	KEN05-31	663	653	0	98.49	1.51
5	SAT1/KEN/13/2005	KEN05-13	663	653	0	98.49	1.51
6	SAT1/KEN/18/2005	KEN05-18	663	652	0	98.34	1.66
7	SAT1/KEN/16/2005	KEN05-16	663	651	0	98.19	1.81
8	SAT1/KEN/9/2006	KEN06-09	663	651	0	98.19	1.81
9	SAT1/KEN/24/2005	KEN05-24	663	649	0	97.89	2.11
10	SAT1/KEN/10/2006	KEN06-10	663	649	0	97.89	2.11

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	512	0	77.22	22.78
3	SAT1/SAR/9/81	SAR81-09	629	481	11	76.47	23.53
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	507	0	76.47	23.53
5	SAT1/SA/2/58 AY593841	SAR58-02	663	502	0	75.72	24.28
6	SAT1/SA/13/61 AY593842	SAR61-13	663	502	0	75.72	24.28
7	SAT1/SWA/40/61 AY593843	SWA61-40	663	499	0	75.26	24.74
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	493	0	74.36	25.64
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	487	0	73.45	26.55
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	460	0	69.38	30.62

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1
WRL Ref No: KEN/9/2006
Sender Ref: K21/2006
Date collected: 29/03/2006
Date received by WRLFMD: 26/05/2006
Date received for sequencing: 07/06/2006
Species: Cattle
Material used: BTy1
Region sequenced: VP1
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R
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: KEN06-09.SEQ
Date sequence last updated: 27/09/2006
Total no. of comparisons: 285
Min. no. of nt for comparison: 300
Total turn-around time: 133 days
Sequencing time: 121 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/17/2005	KEN05-17	663	658	0	99.25	0.75
2	SAT1/KEN/19/2005	KEN05-19	663	657	0	99.1	0.9
3	SAT1/KEN/18/2005	KEN05-18	663	656	0	98.94	1.06
4	SAT1/KEN/24/2005	KEN05-24	663	655	0	98.79	1.21
5	SAT1/KEN/16/2005	KEN05-16	663	655	0	98.79	1.21
6	SAT1/KEN/10/2006	KEN06-10	663	655	0	98.79	1.21
7	SAT1/KEN/31/2005	KEN05-31	663	651	0	98.19	1.81
8	SAT1/KEN/13/2005	KEN05-13	663	651	0	98.19	1.81
9	SAT1/KEN/5/2006	KEN06-05	663	651	0	98.19	1.81
10	SAT1/KEN/32/2005	KEN05-32	663	651	0	98.19	1.81

Relationships to Reference Virus Strains

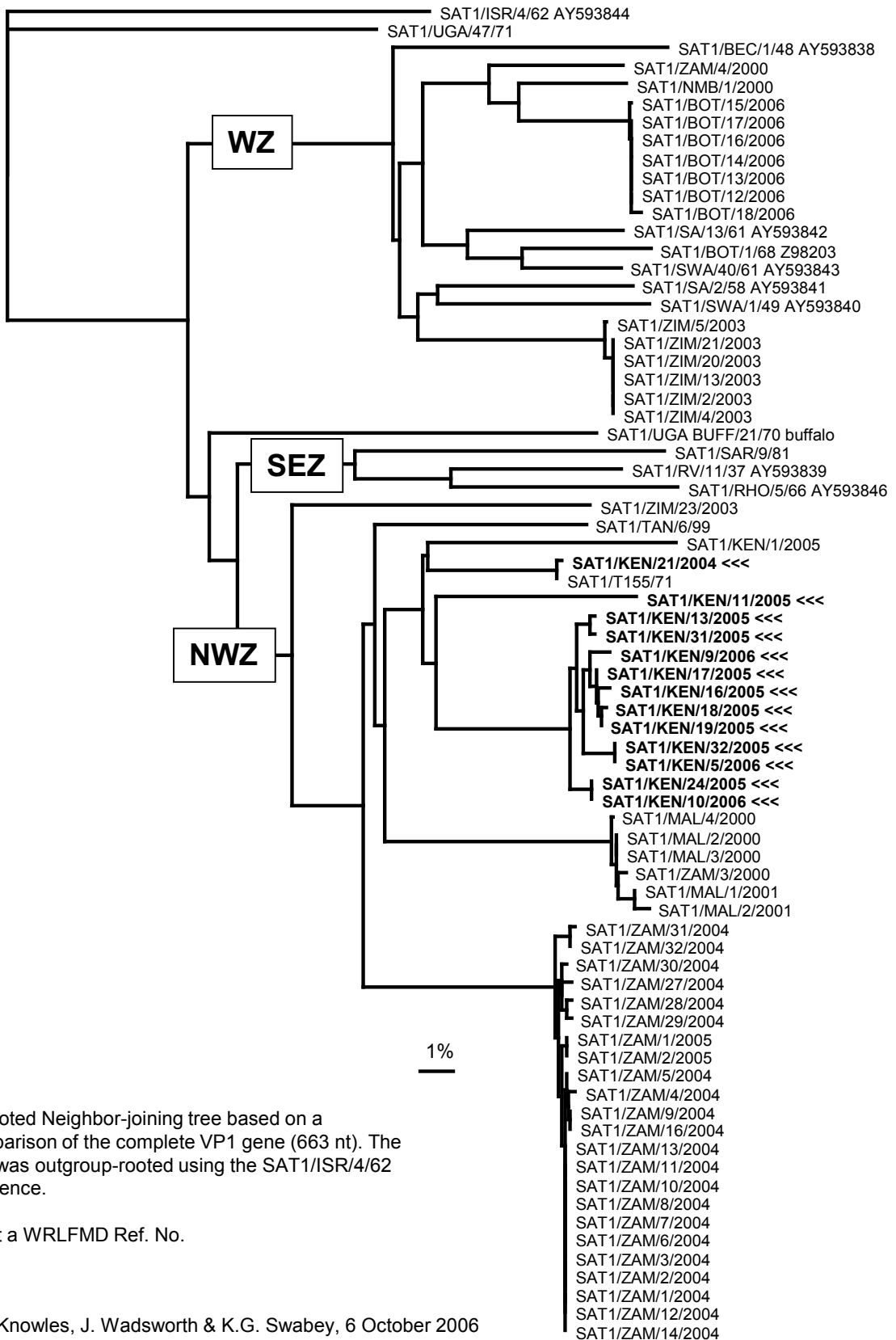
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/T155/71	TAN71155	663	594	0	89.59	10.41
2	SAT1/RV/11/37 AY593839	RHO37-11	663	516	0	77.83	22.17
3	SAT1/SAR/9/81	SAR81-09	629	487	11	77.42	22.58
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	508	0	76.62	23.38
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	498	0	75.11	24.89
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	494	0	74.51	25.49
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	487	0	73.45	26.55
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	469	0	70.74	29.26

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT1		Report date: 06/10/2006					
WRL Ref No: KEN/10/2006							
Sender Ref: K28/2006							
Date collected: 09/05/2006		Topotype: Northwest Zimbabwe (NWZ)					
Date received by WRLFMD: 26/05/2006		Genotype/strain: none designated					
Date received for sequencing: 07/06/2006		Sequence filename: KEN06-10.SEQ					
Species: Cattle		Date sequence last updated: 21/06/2006					
Material used: BTy1		Total no. of comparisons: 285					
Region sequenced: VP1		Min. no. of nt for comparison: 300					
RT-PCR primers: SAT1-P1-1228F/SAT-2B208R		Total turn-around time: 133 days					
No. of Nt determined: 663		Sequencing time: 121 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/24/2005	KEN05-24	663	663	0	100	0
2	SAT1/KEN/17/2005	KEN05-17	663	658	0	99.25	0.75
3	SAT1/KEN/19/2005	KEN05-19	663	657	0	99.1	0.9
4	SAT1/KEN/18/2005	KEN05-18	663	656	0	98.94	1.06
5	SAT1/KEN/16/2005	KEN05-16	663	655	0	98.79	1.21
6	SAT1/KEN/9/2006	KEN06-09	663	655	0	98.79	1.21
7	SAT1/KEN/31/2005	KEN05-31	663	651	0	98.19	1.81
8	SAT1/KEN/13/2005	KEN05-13	663	651	0	98.19	1.81
9	SAT1/KEN/5/2006	KEN06-05	663	649	0	97.89	2.11
10	SAT1/KEN/32/2005	KEN05-32	663	649	0	97.89	2.11
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	518	0	78.13	21.87
3	SAT1/SAR/9/81	SAR81-09	629	487	11	77.42	22.58
4	SAT1/RHO/5/66 AY593846	RHO66-05	663	508	0	76.62	23.38
5	SAT1/SA/2/58 AY593841	SAR58-02	663	505	0	76.17	23.83
6	SAT1/SWA/40/61 AY593843	SWA61-40	663	501	0	75.57	24.43
7	SAT1/SA/13/61 AY593842	SAR61-13	663	499	0	75.26	24.74
8	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	497	0	74.96	25.04
9	SAT1/BEC/1/48 AY593838	BEC48-01	663	488	0	73.6	26.4
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	470	0	70.89	29.11
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.