

Serotype: SAT1		Report date: 10/01/2007					
WRL Ref No: BOT/20/2006							
Sender Ref: BOT 07/06 BUFFALO 2							
Date collected: 19/07/2006							
Date received by WRLFMD: 08/12/2006		Topotype: Western Zimbabwe (WZ)					
Date received for sequencing: 18/12/2006		Genotype/strain: none designated					
Species: African buffalo (<i>Syncerus caffer</i>)		Sequence filename: BOT06-20.SEQ					
Material used: BTy2		Date sequence last updated: 10/01/2007					
Region sequenced: VP1		Total no. of comparisons: 193					
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: 33 days					
No. of ambiguities: 0		Sequencing time: 23 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/BOT/15/2006	BOT06-15	663	653	0	98.49	1.51
2	SAT1/BOT/12/2006	BOT06-12	663	652	0	98.34	1.66
3	SAT1/BOT/13/2006	BOT06-13	663	652	0	98.34	1.66
4	SAT1/BOT/14/2006	BOT06-14	663	652	0	98.34	1.66
5	SAT1/BOT/16/2006	BOT06-16	663	652	0	98.34	1.66
6	SAT1/BOT/17/2006	BOT06-17	663	652	0	98.34	1.66
7	SAT1/BOT/18/2006	BOT06-18	663	650	0	98.04	1.96
8	SAT1/NMB/1/2000	NMB00-01	663	618	0	93.21	6.79
9	SAT1/BOT/22/2006 (buffalo)	BOT06-22	663	614	0	92.61	7.39
10	SAT1/ZIM/P45/91 MT6 buffalo	ZIM91B72	392	359	5	91.58	8.42
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/SWA/40/61 AY593843	SWA61-40	663	586	0	88.39	11.61
2	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	576	0	86.88	13.12
3	SAT1/SA/13/61 AY593842	SAR61-13	663	575	0	86.73	13.27
4	SAT1/SA/2/58 AY593841	SAR58-02	663	569	0	85.82	14.18
5	SAT1/BEC/1/48 AY593838	BEC48-01	663	547	0	82.5	17.5
6	SAT1/RHO/5/66 AY593846	RHO66-05	663	504	0	76.02	23.98
7	SAT1/RV/11/37 AY593839	RHO37-11	663	500	0	75.41	24.59
8	SAT1/T155/71	TAN71155	663	492	0	74.21	25.79
9	SAT1/SAR/9/81	SAR81-09	629	457	11	72.66	27.34
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	445	0	67.12	32.88
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT1 Report date: 10/01/2007
WRL Ref No: BOT/22/2006
Sender Ref: BOT 07/06 BUFFALO 4
Date collected: 19/07/2006
Date received by WRLFMD: 08/12/2006 Topotype: Western Zimbabwe (WZ)
Date received for sequencing: 18/12/2006 Genotype/strain: none designated
Species: African buffalo (*Syncerus caffer*) Sequence filename: BOT06-22.SEQ
Material used: BTy2 Date sequence last updated: 10/01/2007
Region sequenced: VP1 Total no. of comparisons: 193
RT-PCR primers: SAT1-1C559F/SAT-2B208R; Min. no. of nt for comparison: 300
SAT1U-OS/SAT-2B208R Total turn-around time: 33 days
No. of Nt determined: 663 Sequencing time: 23 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/BOT/15/2006	BOT06-15	663	616	0	92.91	7.09
2	SAT1/BOT/12/2006	BOT06-12	663	615	0	92.76	7.24
3	SAT1/BOT/13/2006	BOT06-13	663	615	0	92.76	7.24
4	SAT1/BOT/14/2006	BOT06-14	663	615	0	92.76	7.24
5	SAT1/BOT/16/2006	BOT06-16	663	615	0	92.76	7.24
6	SAT1/BOT/17/2006	BOT06-17	663	615	0	92.76	7.24
7	SAT1/NMB/1/2000	NMB00-01	663	615	0	92.76	7.24
8	SAT1/BOT/20/2006 (buffalo)	BOT06-20	663	614	0	92.61	7.39
9	SAT1/BOT/18/2006	BOT06-18	663	613	0	92.46	7.54
10	SAT1/ZIM/P45/91 MT6 buffalo	ZIM91B72	392	357	5	91.07	8.93

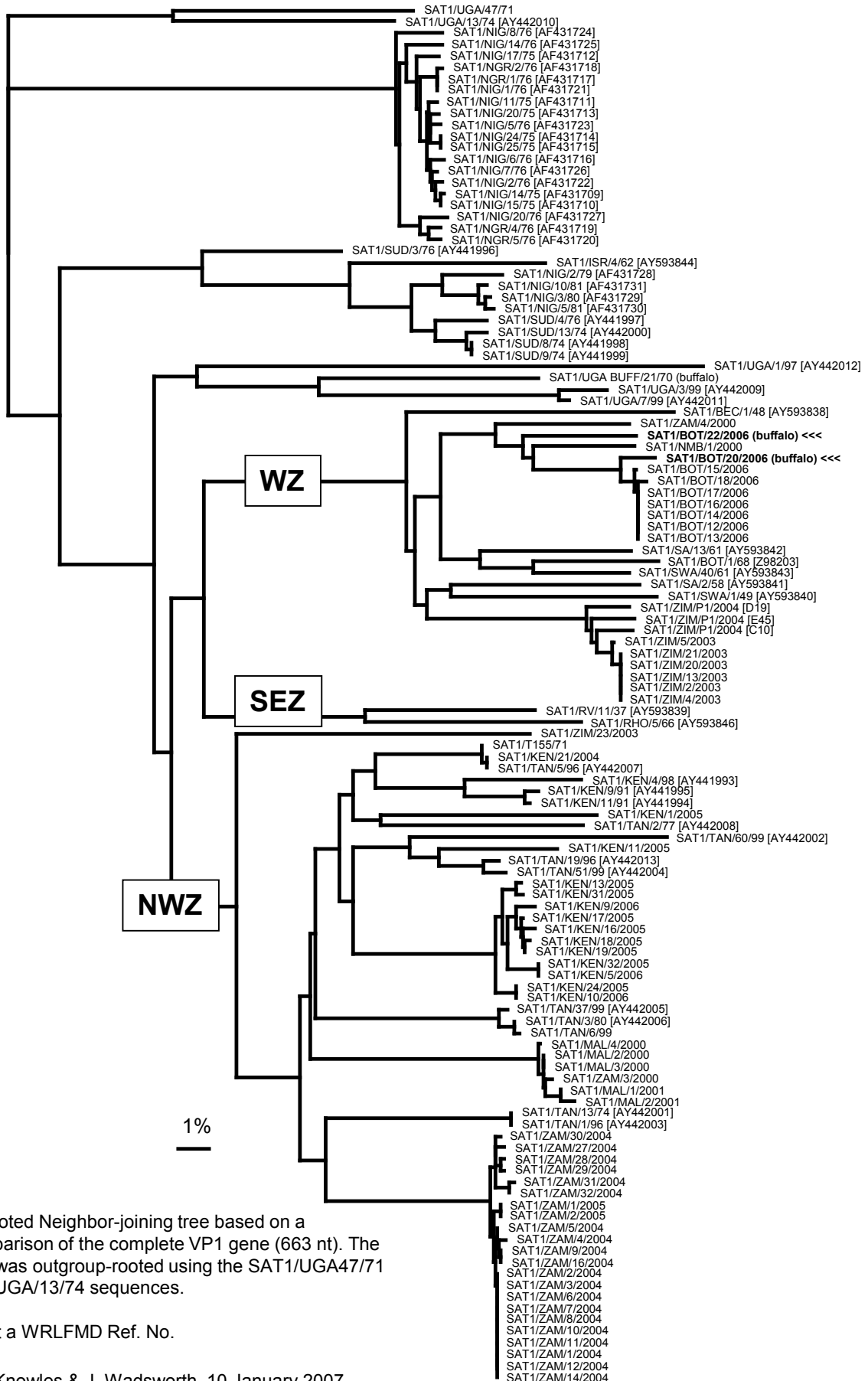
Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/SA/13/61 AY593842	SAR61-13	663	588	0	88.69	11.31
2	SAT1/SWA/40/61 AY593843	SWA61-40	663	588	0	88.69	11.31
3	SAT1/BOT/1/68 [Z98203]	BOT68-B1	663	575	0	86.73	13.27
4	SAT1/SA/2/58 AY593841	SAR58-02	663	562	0	84.77	15.23
5	SAT1/BEC/1/48 AY593838	BEC48-01	663	553	0	83.41	16.59
6	SAT1/RHO/5/66 AY593846	RHO66-05	663	510	0	76.92	23.08
7	SAT1/RV/11/37 AY593839	RHO37-11	663	500	0	75.41	24.59
8	SAT1/T155/71	TAN71155	663	496	0	74.81	25.19
9	SAT1/SAR/9/81	SAR81-09	629	458	11	72.81	27.19
10	SAT1/ISR/4/62 AY593844	ISR62-04	663	448	0	67.57	32.43

nt, nucleotides

*, not a WRLFMD reference number

Report on FMDV SAT 1 from Botswana (buffalo) in 2006



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (663 nt). The tree was outgroup-rooted using the SAT1/UGA47/71 and UGA/13/74 sequences.

*, not a WRLFMD Ref. No.