

Serotype: SAT1	Report date: 24/04/2008
WRL Ref No: ETH/18/2007	
Sender Ref: ETH/14/07	
Date collected: 06/12/2007	
Date received by WRLFMD: 28/03/2008	Topotype: Not designated
Date received for sequencing: 16/04/2008	Genotype/strain: Not designated
Species: Goat	Sequence filename: ETH07-18.SEQ
Material used: BTy2	Date sequence last updated: 23/04/2008
Region sequenced: VP1	Total no. of comparisons: 291
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: 27 days
No. of ambiguities: 0	Sequencing time: 8 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/ETH/19/2007	ETH07-19	663	662	0	99.85	0.15
2	SAT1/ETH/21/2007	ETH07-21	663	662	0	99.85	0.15
3	SAT1/ETH/3/2007	ETH07-03	663	660	0	99.55	0.45
4	SAT1/NIG/5/76 [AF431723]	NIG76-AC	660	509	0	77.12	22.88
5	SAT1/NIG/6/76 [AF431716]	NIG76-AD	660	509	0	77.12	22.88
6	SAT1/NIG/8/76 [AF431724]	NIG76-AF	660	509	0	77.12	22.88
7	SAT1/NGR/5/76 [AF431720]	NGR76-AD	660	508	0	76.97	23.03
8	SAT1/NIG/24/75 [AF431714]	NIG75-AF	660	508	0	76.97	23.03
9	SAT1/NIG/25/75 [AF431715]	NIG75-AG	660	508	0	76.97	23.03
10	SAT1/NIG/11/75 [AF431711]	NIG75-AA	660	507	0	76.82	23.18

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ISR/4/62 (AY593844)	ISR62-04	663	472	0	71.19	28.81
2	SAT1/RV/11/37 (AY593839)	RHO37-11	663	470	0	70.89	29.11
3	SAT1/T155/71	TAN71155	663	467	0	70.44	29.56
4	SAT1/SAR/9/81	SAR81-09	629	439	11	69.79	30.21
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	461	0	69.53	30.47
6	SAT1/BOT/1/68 (Z98203)	BOT68-B1	663	460	0	69.38	30.62
7	SAT1/SR/2/58	ZIM58-02	663	459	0	69.23	30.77
8	SAT1/SWA/40/61	SWA61-40	663	459	0	69.23	30.77
9	SAT1/SA/13/61 (AY593842)	SAR61-13	663	457	0	68.93	31.07
10	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	450	0	67.87	32.13

nt, nucleotides  
\*, not a WRLFMD reference number

Serotype: SAT1  
WRL Ref No: ETH/19/2007  
Sender Ref: ETH/15/07  
Date collected: 07/12/2007  
Date received by WRLFMD: 28/03/2008  
Date received for sequencing: 16/04/2008  
Species: Sheep  
Material used: BTy1  
Region sequenced: VP1  
RT-PCR primers: SAT1-1C559F/SAT-2B208R;  
SAT1U-OS/SAT-2B208R  
No. of Nt determined: 663  
No. of ambiguities: 0  
Gene length: 663

Report date: 24/04/2008  
Topotype: Not designated  
Genotype/strain: Not designated  
Sequence filename: ETH07-19.SEQ  
Date sequence last updated: 23/04/2008  
Total no. of comparisons: 291  
Min. no. of nt for comparison: 300  
Total turn-around time: 27 days  
Sequencing time: 8 days

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ETH/21/2007	ETH07-21	663	663	0	100	0
2	SAT1/ETH/18/2007	ETH07-18	663	662	0	99.85	0.15
3	SAT1/ETH/3/2007	ETH07-03	663	661	0	99.7	0.3
4	SAT1/NIG/5/76 [AF431723]	NIG76-AC	660	510	0	77.27	22.73
5	SAT1/NIG/6/76 [AF431716]	NIG76-AD	660	510	0	77.27	22.73
6	SAT1/NIG/8/76 [AF431724]	NIG76-AF	660	510	0	77.27	22.73
7	SAT1/NGR/5/76 [AF431720]	NGR76-AD	660	509	0	77.12	22.88
8	SAT1/NIG/24/75 [AF431714]	NIG75-AF	660	509	0	77.12	22.88
9	SAT1/NIG/25/75 [AF431715]	NIG75-AG	660	509	0	77.12	22.88
10	SAT1/NIG/11/75 [AF431711]	NIG75-AA	660	508	0	76.97	23.03

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ISR/4/62 (AY593844)	ISR62-04	663	473	0	71.34	28.66
2	SAT1/RV/11/37 (AY593839)	RHO37-11	663	471	0	71.04	28.96
3	SAT1/T155/71	TAN71155	663	468	0	70.59	29.41
4	SAT1/SAR/9/81	SAR81-09	629	440	11	69.95	30.05
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	462	0	69.68	30.32
6	SAT1/BOT/1/68 (Z98203)	BOT68-B1	663	461	0	69.53	30.47
7	SAT1/SR/2/58	ZIM58-02	663	460	0	69.38	30.62
8	SAT1/SWA/40/61	SWA61-40	663	460	0	69.38	30.62
9	SAT1/SA/13/61 (AY593842)	SAR61-13	663	458	0	69.08	30.92
10	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	451	0	68.02	31.98

nt, nucleotides  
\*, not a WRLFMD reference number

Serotype: SAT1  
WRL Ref No: ETH/21/2007  
Sender Ref: ETH/21/07  
Date collected: 07/12/2007  
Date received by WRLFMD: 28/03/2008  
Date received for sequencing: 16/04/2008  
Species: Cattle  
Material used: BTy1  
Region sequenced: VP1  
RT-PCR primers: SAT1-1C559F/SAT-2B208R;  
SAT1U-OS/SAT-2B208R  
No. of Nt determined: 663  
No. of ambiguities: 0  
Gene length: 663

Report date: 24/04/2008  
Topotype: Not designated  
Genotype/strain: Not designated  
Sequence filename: ETH07-21.SEQ  
Date sequence last updated: 23/04/2008  
Total no. of comparisons: 291  
Min. no. of nt for comparison: 300  
Total turn-around time: 27 days  
Sequencing time: 8 days

Comments:

**Ten Most Closely Related Viruses**

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ETH/19/2007	ETH07-19	663	663	0	100	0
2	SAT1/ETH/18/2007	ETH07-18	663	662	0	99.85	0.15
3	SAT1/ETH/3/2007	ETH07-03	663	661	0	99.7	0.3
4	SAT1/NIG/5/76 [AF431723]	NIG76-AC	660	510	0	77.27	22.73
5	SAT1/NIG/6/76 [AF431716]	NIG76-AD	660	510	0	77.27	22.73
6	SAT1/NIG/8/76 [AF431724]	NIG76-AF	660	510	0	77.27	22.73
7	SAT1/NGR/5/76 [AF431720]	NGR76-AD	660	509	0	77.12	22.88
8	SAT1/NIG/24/75 [AF431714]	NIG75-AF	660	509	0	77.12	22.88
9	SAT1/NIG/25/75 [AF431715]	NIG75-AG	660	509	0	77.12	22.88
10	SAT1/NIG/11/75 [AF431711]	NIG75-AA	660	508	0	76.97	23.03

**Relationships to Reference Virus Strains**

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT1/ISR/4/62 (AY593844)	ISR62-04	663	473	0	71.34	28.66
2	SAT1/RV/11/37 (AY593839)	RHO37-11	663	471	0	71.04	28.96
3	SAT1/T155/71	TAN71155	663	468	0	70.59	29.41
4	SAT1/SAR/9/81	SAR81-09	629	440	11	69.95	30.05
5	SAT1/RHO/5/66 (AY593846)	RHO66-05	663	462	0	69.68	30.32
6	SAT1/BOT/1/68 (Z98203)	BOT68-B1	663	461	0	69.53	30.47
7	SAT1/SR/2/58	ZIM58-02	663	460	0	69.38	30.62
8	SAT1/SWA/40/61	SWA61-40	663	460	0	69.38	30.62
9	SAT1/SA/13/61 (AY593842)	SAR61-13	663	458	0	69.08	30.92
10	SAT1/BEC/1/48 (AY593838)	BEC48-01	663	451	0	68.02	31.98

nt, nucleotides  
\*, not a WRLFMD reference number

# Report on FMDV SAT 1 from Ethiopia in 2007

No. of Taxa : 107

Data File : n:\levd\megldb\fmdv\sat1\ETH2007b.meg

Data Title : SAT1 Ethiopia 2007

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

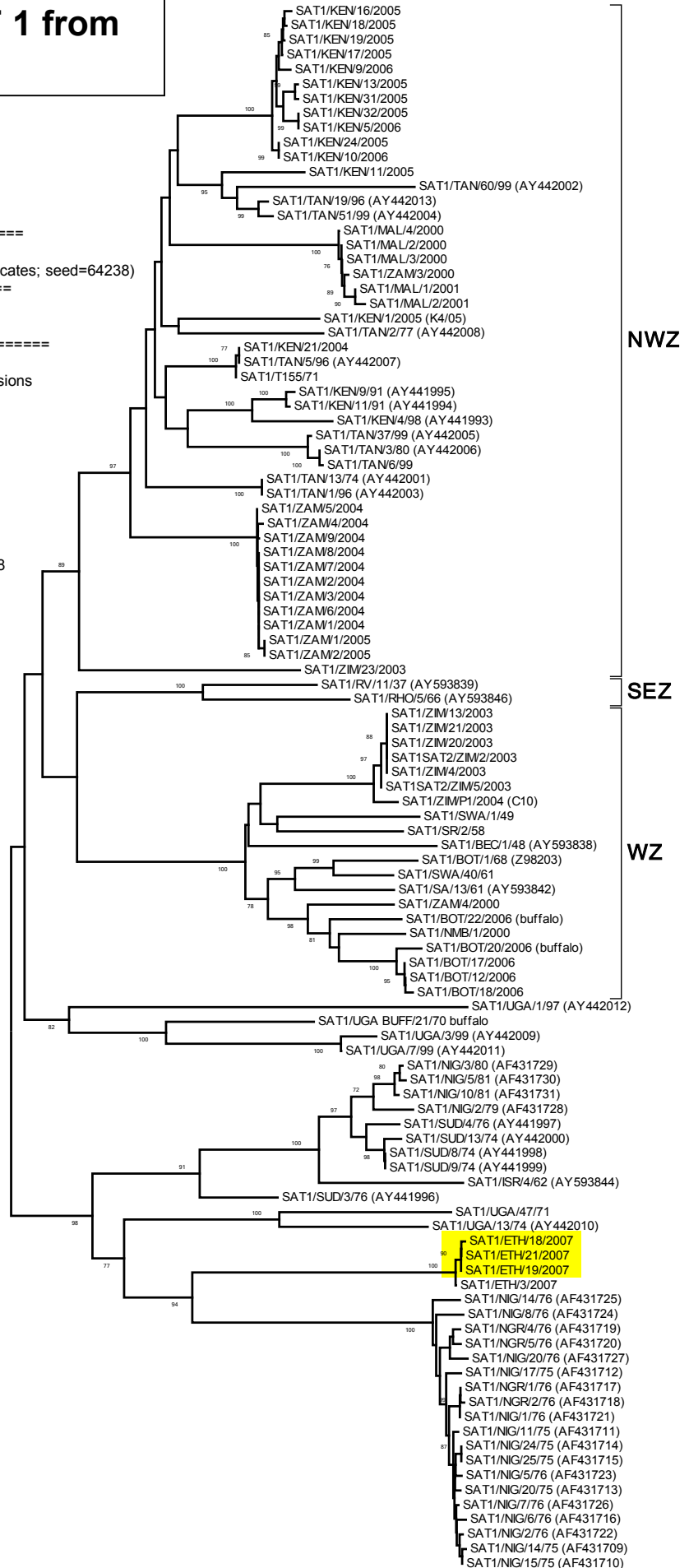
No. of Sites : 663

No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

\*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Ebert, 24 April 2008



0.05