

Serotype: SAT2	Report date: 14/02/2008
WRL Ref No: ETH/2/2007	
Sender Ref: ETH/9/07/BGU	
Date collected: 07/09/2007	
Date received by WRLFMD: 02/02/2008	Topotype: none defined
Date received for sequencing: 07/02/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: ETH07-02.SEQ
Material used: BTy1	Date sequence last updated: 13/02/2008
Region sequenced: VP1	Total no. of comparisons: 382
RT-PCR primers: SAT2-1C445F/SAT-2B-208R; SAT2-P1-1223F/SAT-2B-208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 12 days
No. of ambiguities: 0	Sequencing time: 7 days
Gene length: 648	

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SUD/9/77 (AY442014)	SUD77-AB	648	527	0	81.33	18.67
2	SAT2/SUD/6/77 (AY343939)	SUD77-AA	648	524	0	80.86	19.14
3	SAT2/RWA/2/97	RWA97-02	412	320	8	77.67	22.33
4	SAT2/ETH/2/91 (AY343938)	ETH91-AB	648	499	0	77.01	22.99
5	SAT2/RWA/2/2001 (DQ009730)	RWA01-AA	642	493	0	76.79	23.21
6	SAT2/RWA/1/2000* [AF367134]	RWA00-01	648	496	0	76.54	23.46
7	SAT2/ZAI/1/74 (DQ009737)	ZAI74-AA	642	491	0	76.48	23.52
8	SAT2/MAL/1/2004 (OVI)	MAL04-01	384	292	0	76.04	23.96
9	SAT2/ZIM/1/2001 [OVI]	ZIM01A01	384	291	0	75.78	24.22
10	SAT2/ZIM/1/97	ZIM97-01	414	313	3	75.6	24.4

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/K52/84 (A)	KEN84-AA	648	479	0	73.92	26.08
2	SAT2/SA/106/59 (AY593848)	RSA59--A	648	471	0	72.69	27.31
3	SAT2/KEN/11/60 (AY593849)	KEN60--A	648	470	0	72.53	27.47
4	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	466	0	71.91	28.09
5	SAT2/KEN/3/57	KEN57-03	648	465	0	71.76	28.24
6	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	465	0	71.76	28.24
7	SAT2/K65/82 (Kenya)	KEN82K65	648	460	0	70.99	29.01
8	SAT2/K183/74 (Kenya)	KEN74183	648	458	0	70.68	29.32

nt, nucleotides

\*, not a WRLFMD reference number

# Report on FMDV SAT2 in Ethiopia in 2007

Software: MEGA 4  
No. of Taxa : 160  
Data File : n:\levd\meg\db\fmvdv\sat2\ETH2007a.meg  
Data Title : 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 : 651  
No Of Bootstrap Reps = 1000  
Only bootstrap values of 70% and above are shown

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20 February 2008

