

Serotype: SAT2	Report date: 26/11/2004
WRL Ref No: TAN/4/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-04.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 25/11/2004
No. of Nt determined: 648	Total no. of comparisons: 297
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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/TAN/9/2004	TAN04-09	648	648	0	100	0
2	SAT2/MAL/1/2004 (OVI)	MAL04-01	384	382	0	99.48	0.52
3	SAT2/TAN/6/2004	TAN04-06	648	643	0	99.23	0.77
4	SAT2/TAN/21/2004	TAN04-21	648	643	0	99.23	0.77
5	SAT2/TAN/18/2004	TAN04-18	648	641	0	98.92	1.08
6	SAT2/KEN/2/2002	KEN02-02	418	376	0	89.95	10.05
7	SAT2/KEN/7/99	KEN99-07	366	328	9	89.62	10.38
8	SAT2/KEN/23/98	KEN98-23	382	340	8	89.01	10.99
9	SAT2/MAL/3/75 [AF367099]	MAL75-03	648	575	0	88.73	11.27
10	SAT2/BUN/1/91	BUN91-01	648	552	0	85.19	14.81

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/K52/84*	KEN84K52	418	372	0	89	11
2	SAT2/RHO/1/48	ZAM48A01	648	514	0	79.32	20.68
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	511	0	78.86	21.14
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/9/89	ZIM89-09	218	166	1	76.15	23.85
6	SAT2/ZIM/7/83* [AF136607]	ZIM83A07	648	482	0	74.38	25.62
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	457	0	70.52	29.48
8	SAT2/KEN/3/57	KEN57-03	648	453	0	69.91	30.09

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: SAT2	Report date: 26/11/2004
WRL Ref No: TAN/6/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-06.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 25/11/2004
No. of Nt determined: 648	Total no. of comparisons: 297
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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/TAN/4/2004	TAN04-04	648	643	0	99.23	0.77
2	SAT2/TAN/9/2004	TAN04-09	648	643	0	99.23	0.77
3	SAT2/TAN/21/2004	TAN04-21	648	640	0	98.77	1.23
4	SAT2/TAN/18/2004	TAN04-18	648	638	0	98.46	1.54
5	SAT2/MAL/1/2004 (OVI)	MAL04-01	384	378	0	98.44	1.56
6	SAT2/KEN/7/99	KEN99-07	366	326	9	89.07	10.93
7	SAT2/KEN/2/2002	KEN02-02	418	372	0	89	11
8	SAT2/KEN/23/98	KEN98-23	382	338	8	88.48	11.52
9	SAT2/MAL/3/75 [AF367099]	MAL75-03	648	572	0	88.27	11.73
10	SAT2/BUN/1/91	BUN91-01	648	550	0	84.88	15.12

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/K52/84*	KEN84K52	418	369	0	88.28	11.72
2	SAT2/RHO/1/48	ZAM48A01	648	516	0	79.63	20.37
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	511	0	78.86	21.14
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	153	6	77.27	22.73
5	SAT2/ZIM/9/89	ZIM89-09	218	167	1	76.61	23.39
6	SAT2/ZIM/7/83* [AF136607]	ZIM83A07	648	483	0	74.54	25.46
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	455	0	70.22	29.78
8	SAT2/KEN/3/57	KEN57-03	648	453	0	69.91	30.09

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: SAT2	Report date: 26/11/2004
WRL Ref No: TAN/9/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-09.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 25/11/2004
No. of Nt determined: 648	Total no. of comparisons: 297
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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/TAN/4/2004	TAN04-04	648	648	0	100	0
2	SAT2/MAL/1/2004 (OVI)	MAL04-01	384	382	0	99.48	0.52
3	SAT2/TAN/21/2004	TAN04-21	648	643	0	99.23	0.77
4	SAT2/TAN/6/2004	TAN04-06	648	643	0	99.23	0.77
5	SAT2/TAN/18/2004	TAN04-18	648	641	0	98.92	1.08
6	SAT2/KEN/2/2002	KEN02-02	418	376	0	89.95	10.05
7	SAT2/KEN/7/99	KEN99-07	366	328	9	89.62	10.38
8	SAT2/KEN/23/98	KEN98-23	382	340	8	89.01	10.99
9	SAT2/MAL/3/75 [AF367099]	MAL75-03	648	575	0	88.73	11.27
10	SAT2/BUN/1/91	BUN91-01	648	552	0	85.19	14.81

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/K52/84*	KEN84K52	418	372	0	89	11
2	SAT2/RHO/1/48	ZAM48A01	648	514	0	79.32	20.68
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	511	0	78.86	21.14
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/9/89	ZIM89-09	218	166	1	76.15	23.85
6	SAT2/ZIM/7/83* [AF136607]	ZIM83A07	648	482	0	74.38	25.62
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	457	0	70.52	29.48
8	SAT2/KEN/3/57	KEN57-03	648	453	0	69.91	30.09

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: SAT2	Report date: 26/11/2004
WRL Ref No: TAN/18/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-18.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 25/11/2004
No. of Nt determined: 648	Total no. of comparisons: 297
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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/TAN/9/2004	TAN04-09	648	641	0	98.92	1.08
2	SAT2/TAN/4/2004	TAN04-04	648	641	0	98.92	1.08
3	SAT2/TAN/21/2004	TAN04-21	648	640	0	98.77	1.23
4	SAT2/TAN/6/2004	TAN04-06	648	638	0	98.46	1.54
5	SAT2/MAL/1/2004 (OVI)	MAL04-01	384	377	0	98.18	1.82
6	SAT2/KEN/7/99	KEN99-07	366	326	9	89.07	10.93
7	SAT2/KEN/2/2002	KEN02-02	418	372	0	89	11
8	SAT2/MAL/3/75 [AF367099]	MAL75-03	648	575	0	88.73	11.27
9	SAT2/KEN/23/98	KEN98-23	382	338	8	88.48	11.52
10	SAT2/BUN/1/91	BUN91-01	648	557	0	85.96	14.04

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/K52/84*	KEN84K52	418	372	0	89	11
2	SAT2/RHO/1/48	ZAM48A01	648	521	0	80.4	19.6
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	512	0	79.01	20.99
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	153	6	77.27	22.73
5	SAT2/ZIM/9/89	ZIM89-09	218	166	1	76.15	23.85
6	SAT2/ZIM/7/83* [AF136607]	ZIM83A07	648	489	0	75.46	24.54
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	456	0	70.37	29.63
8	SAT2/KEN/3/57	KEN57-03	648	452	0	69.75	30.25

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: SAT2	Report date: 26/11/2004
WRL Ref No: TAN/21/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-21.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 25/11/2004
No. of Nt determined: 648	Total no. of comparisons: 297
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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/TAN/9/2004	TAN04-09	648	643	0	99.23	0.77
2	SAT2/TAN/4/2004	TAN04-04	648	643	0	99.23	0.77
3	SAT2/MAL/1/2004 (OVI)	MAL04-01	384	381	0	99.22	0.78
4	SAT2/TAN/18/2004	TAN04-18	648	640	0	98.77	1.23
5	SAT2/TAN/6/2004	TAN04-06	648	640	0	98.77	1.23
6	SAT2/KEN/7/99	KEN99-07	366	329	9	89.89	10.11
7	SAT2/KEN/2/2002	KEN02-02	418	375	0	89.71	10.29
8	SAT2/KEN/23/98	KEN98-23	382	341	8	89.27	10.73
9	SAT2/MAL/3/75 [AF367099]	MAL75-03	648	574	0	88.58	11.42
10	SAT2/BUN/1/91	BUN91-01	648	551	0	85.03	14.97

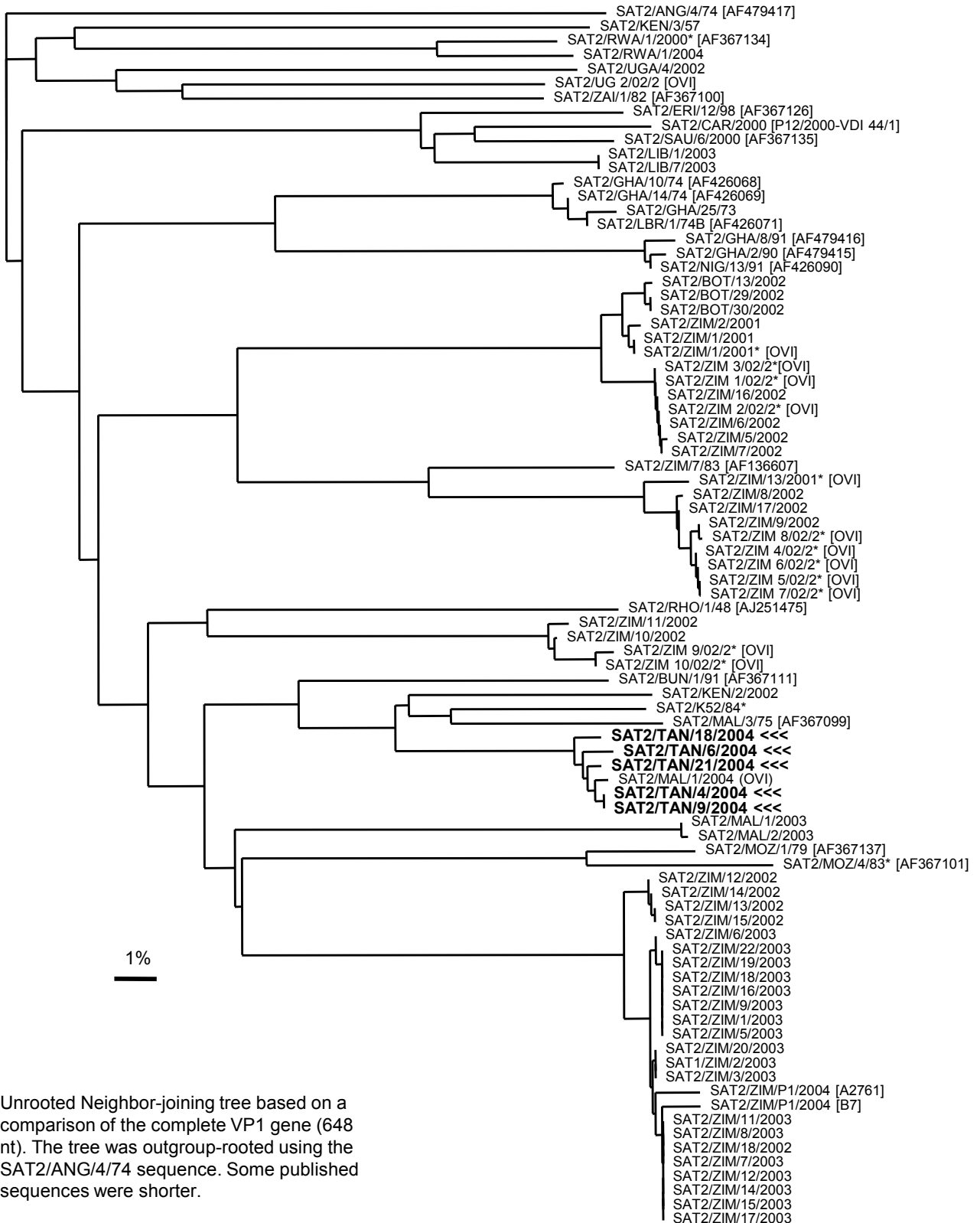
### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/K52/84*	KEN84K52	418	373	0	89.23	10.77
2	SAT2/RHO/1/48	ZAM48A01	648	513	0	79.17	20.83
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	510	0	78.7	21.3
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/9/89	ZIM89-09	218	166	1	76.15	23.85
6	SAT2/ZIM/7/83* [AF136607]	ZIM83A07	648	482	0	74.38	25.62
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	456	0	70.37	29.63
8	SAT2/KEN/3/57	KEN57-03	648	452	0	69.75	30.25

nt, nucleotides

\*, not a WRLFMD reference number

# Report on FMDV SAT 2 isolates from Tanzania in 2004



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (648 nt). The tree was outgroup-rooted using the SAT2/ANG/4/74 sequence. Some published sequences were shorter.

\*, not a WRLFMD Ref. No.