

Serotype: SAT2	Report date: 11/11/2004
WRL Ref No: ZIM/20/2003	
Date collected: not known	
Date received: 06/07/2004	Topotype: none
Species: not known	Genotype/strain: none
Material used: PK1 RS1 BTy2	Sequence filename: ZIM03-20.SEQ
Region sequenced: VP1	Date sequence last updated: 10/11/2004
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R; SAT2VP3-AB/SAT-2B208R	Total no. of comparisons: 288
No. of Nt determined: 648	Min. no. of nt for comparison: 300
No. of ambiguities: 0	
Gene length: 648	

Comments: This sample also contained FMDV SAT1 (see separate report). Initial RT-PCR gave a strong SAT1 product but only a weak SAT2 product. The mixture was neutralized with an anti-SAT1 guinea pig serum (SAT1/RHO buff/1/68) and further passed on primary bovine thyroid cells (both in the presence and absence of the same SAT1 antiserum). RT-PCR of RNA extracted from this stock gave products with primers for SAT2, but no products with primers specific for SAT1.

#### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/3/2003	ZIM03-03	648	648	0	100	0
2	SAT2/ZIM/2/2003**	ZIM03-02	648	648	0	100	0
3	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
4	SAT2/ZIM/15/2003	ZIM03-15	648	646	0	99.69	0.31
5	SAT2/ZIM/1/2003	ZIM03-01	648	646	0	99.69	0.31
6	SAT2/ZIM/17/2003	ZIM03-17	648	646	0	99.69	0.31
7	SAT2/ZIM/14/2003	ZIM03-14	648	646	0	99.69	0.31
8	SAT2/ZIM/9/2003	ZIM03-09	648	646	0	99.69	0.31
9	SAT2/ZIM/11/2003	ZIM03-11	648	646	0	99.69	0.31
10	SAT2/ZIM/12/2003	ZIM03-12	648	646	0	99.69	0.31

\*\* this sample also contained FMDV SAT1

#### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	ZAM/3/81*	ZAM81V03	198	152	6	76.77	23.23
2	RHO/1/48	ZAM48A01	648	496	0	76.54	23.46
3	ZIM/7/83*	ZIM83A07	648	485	0	74.85	25.15
4	ZIM/9/89	ZIM89-09	218	162	1	74.31	25.69
5	KEN/3/57	KEN57-03	648	459	0	70.83	29.17

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: SAT2  
WRL Ref No: ZIM/22/2003  
Date collected: not known  
Date received: 06/07/2004  
Species: not known  
Material used: PK1 BTy1  
Region sequenced: VP1  
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R  
No. of Nt determined: 648  
No. of ambiguities: 0  
Gene length: 648

Report date: 11/11/2004  
Topotype: none  
Genotype/strain: none  
Sequence filename: ZIM03-22.SEQ  
Date sequence last updated: 19/08/2004  
Total no. of comparisons: 288  
Min. no. of nt for comparison: 300

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/1/2003	ZIM03-01	648	648	0	100	0
2	SAT2/ZIM/9/2003	ZIM03-09	648	648	0	100	0
3	SAT2/ZIM/16/2003	ZIM03-16	648	648	0	100	0
4	SAT2/ZIM/19/2003	ZIM03-19	648	648	0	100	0
5	SAT2/ZIM/18/2003	ZIM03-18	648	647	0	99.85	0.15
6	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
7	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
8	SAT2/ZIM/2/2003**	ZIM03-02	648	646	0	99.69	0.31
9	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
10	SAT2/ZIM/5/2003**	ZIM03-05	648	646	0	99.69	0.31

\*\* This sample also contained FMDV SAT1

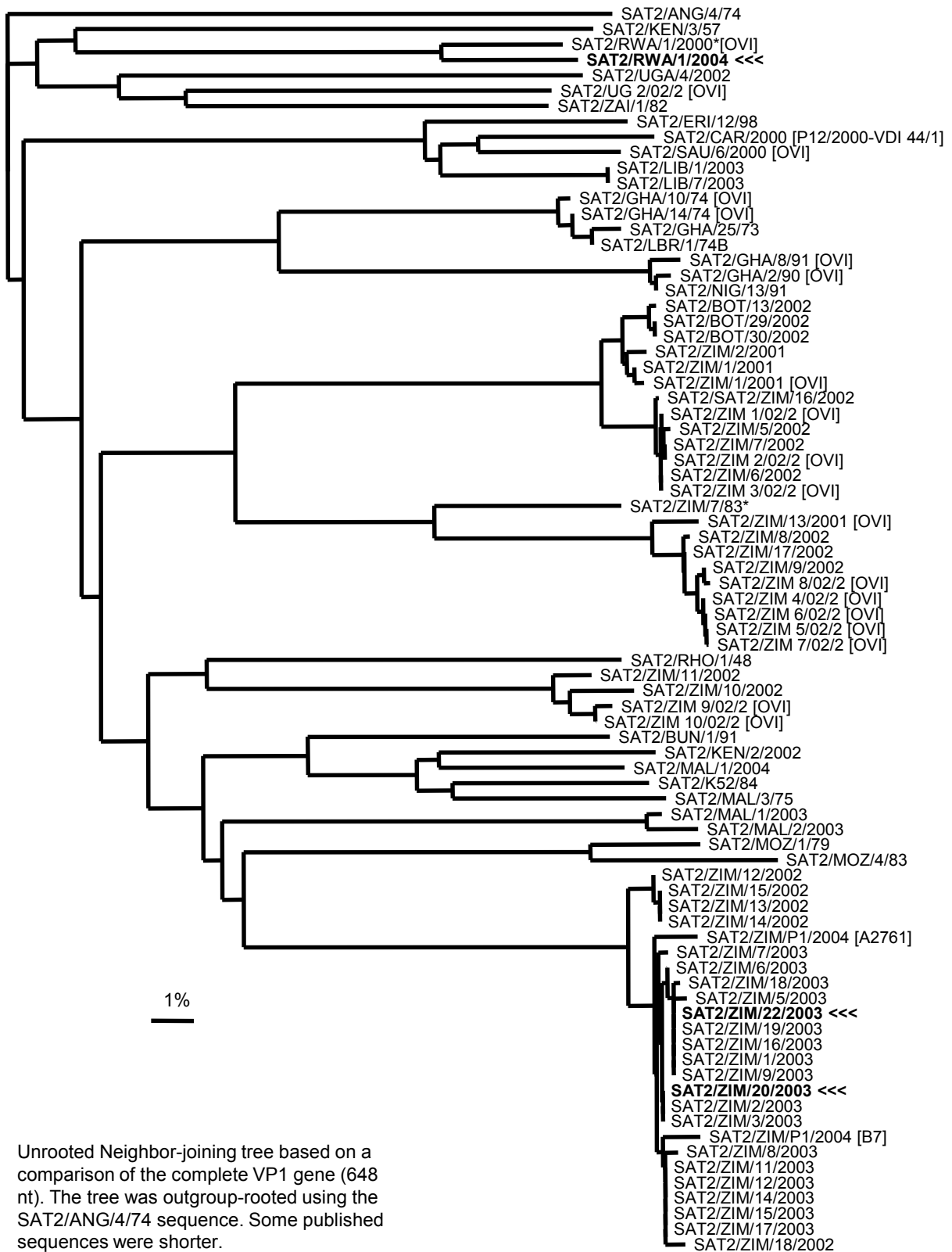
### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	RHO/1/48	ZAM48A01	648	495	0	76.39	23.61
2	ZAM/3/81*	ZAM81V03	198	151	6	76.26	23.74
3	ZIM/7/83*	ZIM83A07	648	483	0	74.54	25.46
4	ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
5	KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

\*, not a WRLFMD reference number

**Report on FMDV SAT 2 isolates from Zimbabwe in 2003 and Rwanda in 2004 (received from the OVI)**



\* , not a WRLFMD Ref. No.