

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/1/2001	
Date collected: 20/08/2001	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: RM3 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM01-01.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 07/07/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/1/2001 [OVI]	ZIM01A01	384	384	0	100	0
2	SAT2/ZIM/2/2001	ZIM01-02	648	646	0	99.69	0.31
3	SAT2/BOT/11/2002	BOT02-11	384	381	0	99.22	0.78
4	SAT2/BOT/29/2002	BOT02-29	648	642	0	99.07	0.93
5	SAT2/BOT/30/2002	BOT02-30	648	642	0	99.07	0.93
6	SAT2/BOT/13/2002	BOT02-13	647	641	1	99.07	0.93
7	SAT2/BOT/8/2002	BOT02-08	418	414	0	99.04	0.96
8	SAT2/ZIM 3/02/2 (OVI)	ZIM02-AC	417	410	0	98.32	1.68
9	SAT2/ZIM 1/02/2 (OVI)	ZIM02-AA	417	410	0	98.32	1.68
10	SAT2/ZIM 2/02/2 (OVI)	ZIM02-AB	414	407	0	98.31	1.69

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/9/89	ZIM89-09	218	178	1	81.65	18.35
2	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	523	0	80.71	19.29
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
4	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	492	0	75.93	24.07
5	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	491	0	75.77	24.23
6	SAT2/K52/84 (Kenya)	KEN84K52	418	315	0	75.36	24.64
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	468	0	72.22	27.78
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2		Report date: 07/12/2004					
WRL Ref No: ZIM/2/2001							
Date collected: 20/08/2001							
Date received: 17/05/2004							
Species: Bovine		Topotype: none defined					
Material used: RM3 BTy1		Genotype/strain: none designated					
Region sequenced: VP1		Sequence filename: ZIM01-02.SEQ					
RT-PCR primers: SAT2VP3-AB/SAT-2B208R		Date sequence last updated: 29/11/2004					
No. of Nt determined: 648		Total no. of comparisons: 305					
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/ZIM/1/2001	ZIM01-01	648	646	0	99.69	0.31
2	SAT2/ZIM/1/2001 [OVI]	ZIM01A01	384	382	0	99.48	0.52
3	SAT2/BOT/30/2002	BOT02-30	648	640	0	98.77	1.23
4	SAT2/BOT/29/2002	BOT02-29	648	640	0	98.77	1.23
5	SAT2/BOT/13/2002	BOT02-13	647	639	1	98.76	1.24
6	SAT2/BOT/11/2002	BOT02-11	384	379	0	98.7	1.3
7	SAT2/BOT/8/2002	BOT02-08	418	412	0	98.56	1.44
8	SAT2/ZIM/16/2002	ZIM02-16	648	635	0	97.99	2.01
9	SAT2/ZIM/5/2002	ZIM02-05	648	635	0	97.99	2.01
10	SAT2/ZIM/7/2002	ZIM02-07	648	635	0	97.99	2.01
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/9/89	ZIM89-09	218	178	1	81.65	18.35
2	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	523	0	80.71	19.29
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
4	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	491	0	75.77	24.23
5	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	490	0	75.62	24.38
6	SAT2/K52/84 (Kenya)	KEN84K52	418	314	0	75.12	24.88
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	466	0	71.91	28.09
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/5/2002	
Date collected: Apr. 2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-05.SEQ
RT-PCR primers: SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 30/11/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/7/2002	ZIM02-07	648	648	0	100	0
2	SAT2/ZIM/16/2002	ZIM02-16	648	648	0	100	0
3	SAT2/ZIM 1/02/2 (OVI)	ZIM02-AA	417	417	0	100	0
4	SAT2/ZIM 2/02/2 (OVI)	ZIM02-AB	414	414	0	100	0
5	SAT2/ZIM 3/02/2 (OVI)	ZIM02-AC	417	417	0	100	0
6	SAT2/ZIM/6/2002	ZIM02-06	648	648	0	100	0
7	SAT2/ZIM/1/2001	ZIM01-01	648	637	0	98.3	1.7
8	SAT2/ZIM/1/2001 [OVI]	ZIM01A01	384	377	0	98.18	1.82
9	SAT2/ZIM/2/2001	ZIM01-02	648	635	0	97.99	2.01
10	SAT2/BOT/11/2002	BOT02-11	384	374	0	97.4	2.6

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/9/89	ZIM89-09	218	175	1	80.28	19.72
2	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	519	0	80.09	19.91
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	488	0	75.31	24.69
4	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	487	0	75.15	24.85
5	SAT2/K52/84 (Kenya)	KEN84K52	418	311	0	74.4	25.6
6	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	147	6	74.24	25.76
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	465	0	71.76	28.24
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2		Report date: 07/12/2004					
WRL Ref No: ZIM/6/2002							
Date collected: Apr. 2002							
Date received: 17/05/2004							
Species: Bovine		Topotype: none defined					
Material used: RM2 BTy1		Genotype/strain: none designated					
Region sequenced: VP1		Sequence filename: ZIM02-06.SEQ					
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R		Date sequence last updated: 30/11/2004					
No. of Nt determined: 648		Total no. of comparisons: 305					
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/ZIM/7/2002	ZIM02-07	648	648	0	100	0
2	SAT2/ZIM/16/2002	ZIM02-16	648	648	0	100	0
3	SAT2/ZIM 1/02/2 (OVI)	ZIM02-AA	417	417	0	100	0
4	SAT2/ZIM 2/02/2 (OVI)	ZIM02-AB	414	414	0	100	0
5	SAT2/ZIM 3/02/2 (OVI)	ZIM02-AC	417	417	0	100	0
6	SAT2/ZIM/5/2002	ZIM02-05	648	648	0	100	0
7	SAT2/ZIM/1/2001	ZIM01-01	648	637	0	98.3	1.7
8	SAT2/ZIM/1/2001 [OVI]	ZIM01A01	384	377	0	98.18	1.82
9	SAT2/ZIM/2/2001	ZIM01-02	648	635	0	97.99	2.01
10	SAT2/BOT/11/2002	BOT02-11	384	374	0	97.4	2.6
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/9/89	ZIM89-09	218	175	1	80.28	19.72
2	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	519	0	80.09	19.91
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	488	0	75.31	24.69
4	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	487	0	75.15	24.85
5	SAT2/K52/84 (Kenya)	KEN84K52	418	311	0	74.4	25.6
6	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	147	6	74.24	25.76
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	465	0	71.76	28.24
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/7/2002	
Date collected: Apr. 2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: RM2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-07.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 30/11/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/6/2002	ZIM02-06	648	648	0	100	0
2	SAT2/ZIM/16/2002	ZIM02-16	648	648	0	100	0
3	SAT2/ZIM 1/02/2 (OVI)	ZIM02-AA	417	417	0	100	0
4	SAT2/ZIM 2/02/2 (OVI)	ZIM02-AB	414	414	0	100	0
5	SAT2/ZIM 3/02/2 (OVI)	ZIM02-AC	417	417	0	100	0
6	SAT2/ZIM/5/2002	ZIM02-05	648	648	0	100	0
7	SAT2/ZIM/1/2001	ZIM01-01	648	637	0	98.3	1.7
8	SAT2/ZIM/1/2001 [OVI]	ZIM01A01	384	377	0	98.18	1.82
9	SAT2/ZIM/2/2001	ZIM01-02	648	635	0	97.99	2.01
10	SAT2/BOT/11/2002	BOT02-11	384	374	0	97.4	2.6

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/9/89	ZIM89-09	218	175	1	80.28	19.72
2	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	519	0	80.09	19.91
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	488	0	75.31	24.69
4	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	487	0	75.15	24.85
5	SAT2/K52/84 (Kenya)	KEN84K52	418	311	0	74.4	25.6
6	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	147	6	74.24	25.76
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	465	0	71.76	28.24
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2				Report date: 07/12/2004			
WRL Ref No: ZIM/8/2002							
Date collected: 01/06/2002							
Date received: 17/05/2004							
Species: Bovine				Topotype: none defined			
Material used: IRPI2 BTy1				Genotype/strain: none designated			
Region sequenced: VP1				Sequence filename: ZIM02-08.SEQ			
RT-PCR primers: SAT2VP3-AB/SAT-2B208R				Date sequence last updated: 22/11/2004			
No. of Nt determined: 648				Total no. of comparisons: 305			
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/ZIM/17/2002	ZIM02-17	648	647	0	99.85	0.15
2	SAT2/ZIM 4/02/2 (OVI)	ZIM02-AD	416	415	0	99.76	0.24
3	SAT2/ZIM/9/2002	ZIM02-09	648	646	0	99.69	0.31
4	SAT2/ZIM 5/02/2 (OVI)	ZIM02-AE	419	417	0	99.52	0.48
5	SAT2/ZIM 6/02/2 (OVI)	ZIM02-AF	416	414	0	99.52	0.48
6	SAT2/ZIM 7/02/2 (OVI)	ZIM02-AG	414	412	0	99.52	0.48
7	SAT2/ZIM 8/02/2 (OVI)	ZIM02-AH	390	388	0	99.49	0.51
8	SAT2/ZIM/13/2001 [OVI]	ZIM01A13	412	403	7	97.82	2.18
9	SAT2/ZIM/4/97	ZIM97-04	413	364	5	88.14	11.86
10	SAT2/ZIM/2/97	ZIM97-02	412	363	5	88.11	11.89
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	579	0	89.35	10.65
2	SAT2/ZIM/9/89	ZIM89-09	218	186	1	85.32	14.68
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	487	0	75.15	24.85
4	SAT2/K52/84 (Kenya)	KEN84K52	418	313	0	74.88	25.12
5	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	146	6	73.74	26.26
6	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	475	0	73.3	26.7
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	462	0	71.3	28.7
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: 07/12/2004
WRL Ref No: ZIM/9/2002	
Date collected: 01/07/2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: RM2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-09.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 01/12/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM 8/02/2 (OVI)	ZIM02-AH	390	390	0	100	0
2	SAT2/ZIM/17/2002	ZIM02-17	648	647	0	99.85	0.15
3	SAT2/ZIM 4/02/2 (OVI)	ZIM02-AD	416	415	0	99.76	0.24
4	SAT2/ZIM/8/2002	ZIM02-08	648	646	0	99.69	0.31
5	SAT2/ZIM 5/02/2 (OVI)	ZIM02-AE	419	417	0	99.52	0.48
6	SAT2/ZIM 6/02/2 (OVI)	ZIM02-AF	416	414	0	99.52	0.48
7	SAT2/ZIM 7/02/2 (OVI)	ZIM02-AG	414	412	0	99.52	0.48
8	SAT2/ZIM/13/2001 [OVI]	ZIM01A13	412	405	7	98.3	1.7
9	SAT2/ZIM/4/97	ZIM97-04	413	364	5	88.14	11.86
10	SAT2/ZIM/2/97	ZIM97-02	412	363	5	88.11	11.89

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	580	0	89.51	10.49
2	SAT2/ZIM/9/89	ZIM89-09	218	187	1	85.78	14.22
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	488	0	75.31	24.69
4	SAT2/K52/84 (Kenya)	KEN84K52	418	314	0	75.12	24.88
5	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	146	6	73.74	26.26
6	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	476	0	73.46	26.54
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/KEN/3/57	KEN57-03	648	455	0	70.22	29.78

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2		Report date: 07/12/2004					
WRL Ref No: ZIM/10/2002							
Date collected: Aug. 2002							
Date received: 17/05/2004							
Species: Bovine		Topotype: none defined					
Material used: IRPI2 BTy1		Genotype/strain: none designated					
Region sequenced: VP1		Sequence filename: ZIM02-10.SEQ					
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R		Date sequence last updated: 11/07/2004					
No. of Nt determined: 648		Total no. of comparisons: 305					
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/ZIM/11/2002	ZIM02-11	648	644	0	99.38	0.62
2	SAT2/ZIM 10/02/2 (OVI)	ZIM02-AJ	489	484	0	98.98	1.02
3	SAT2/ZIM 9/02/2 (OVI)	ZIM02-AI	486	479	0	98.56	1.44
4	SAT2/BOT/P3/98 (buff 29)	BOW98-15	366	321	6	87.7	12.3
5	SAT2/TAN/18/2004	TAN04-18	648	517	0	79.78	20.22
6	SAT2/TAN/21/2004	TAN04-21	648	515	0	79.48	20.52
7	SAT2/ZIM/14/2002	ZIM02-14	648	514	0	79.32	20.68
8	SAT2/TAN/4/2004	TAN04-04	648	514	0	79.32	20.68
9	SAT2/ZIM/12/2002	ZIM02-12	648	514	0	79.32	20.68
10	SAT2/TAN/9/2004	TAN04-09	648	514	0	79.32	20.68
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	533	0	82.25	17.75
2	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	159	6	80.3	19.7
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	505	0	77.93	22.07
4	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	495	0	76.39	23.61
5	SAT2/K52/84 (Kenya)	KEN84K52	418	319	0	76.32	23.68
6	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	469	0	72.38	27.62
7	SAT2/KEN/3/57	KEN57-03	648	468	0	72.22	27.78
8	SAT2/ZIM/9/89	ZIM89-09	218	157	1	72.02	27.98
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/11/2002	
Date collected: Aug. 2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-11.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 01/12/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/10/2002	ZIM02-10	648	644	0	99.38	0.62
2	SAT2/ZIM 10/02/2 (OVI)	ZIM02-AJ	489	481	0	98.36	1.64
3	SAT2/ZIM 9/02/2 (OVI)	ZIM02-AI	486	476	0	97.94	2.06
4	SAT2/BOT/P3/98 (buff 29)	BOW98-15	366	320	6	87.43	12.57
5	SAT2/TAN/18/2004	TAN04-18	648	517	0	79.78	20.22
6	SAT2/TAN/21/2004	TAN04-21	648	515	0	79.48	20.52
7	SAT2/TAN/4/2004	TAN04-04	648	514	0	79.32	20.68
8	SAT2/TAN/9/2004	TAN04-09	648	514	0	79.32	20.68
9	SAT2/ZIM/12/2002	ZIM02-12	648	512	0	79.01	20.99
10	SAT2/ZIM/14/2002	ZIM02-14	648	512	0	79.01	20.99

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	530	0	81.79	18.21
2	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	157	6	79.29	20.71
3	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	503	0	77.62	22.38
4	SAT2/K52/84 (Kenya)	KEN84K52	418	320	0	76.56	23.44
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	492	0	75.93	24.07
6	SAT2/ZIM/9/89	ZIM89-09	218	157	1	72.02	27.98
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	466	0	71.91	28.09
8	SAT2/KEN/3/57	KEN57-03	648	465	0	71.76	28.24

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/12/2002	
Date collected: Aug. 2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-12.SEQ
RT-PCR primers: SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 02/12/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM 12/02/2 (OVI)	ZIM02-AL	474	474	0	100	0
2	SAT2/ZIM/14/2002	ZIM02-14	648	648	0	100	0
3	SAT2/ZIM 11/02/2 (OVI)	ZIM02-AK	486	486	0	100	0
4	SAT2/ZIM/15/2002	ZIM02-15	648	647	0	99.85	0.15
5	SAT2/ZIM/13/2002	ZIM02-13	648	647	0	99.85	0.15
6	SAT2/ZIM 13/02/2 (OVI)	ZIM02-AM	465	464	0	99.78	0.22
7	SAT2/ZIM/5/2003	ZIM03-05	648	641	0	98.92	1.08
8	SAT2/ZIM/16/2003	ZIM03-16	648	641	0	98.92	1.08
9	SAT2/ZIM/18/2003	ZIM03-18	648	641	0	98.92	1.08
10	SAT2/ZIM/19/2003	ZIM03-19	648	641	0	98.92	1.08

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	526	0	81.17	18.83
2	SAT2/K52/84 (Kenya)	KEN84K52	418	327	0	78.23	21.77
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	153	6	77.27	22.73
4	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	496	0	76.54	23.46
5	SAT2/ZIM/9/89	ZIM89-09	218	163	1	74.77	25.23
6	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	463	0	71.45	28.55
8	SAT2/KEN/3/57	KEN57-03	648	456	0	70.37	29.63

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2

Report date: 07/12/2004

WRL Ref No: ZIM/13/2002

Date collected: Aug. 2002

Date received: 17/05/2004

Species: Bovine

Material used: IRPI2 BTy1

Topotype: none defined

Region sequenced: VP1

Genotype/strain: none designated

RT-PCR primers: SAT2-P1-1223F/SAT-2B208R

Sequence filename: ZIM02-13.SEQ

No. of Nt determined: 648

Date sequence last updated: 02/12/2004

No. of ambiguities: 0

Total no. of comparisons: 305

Gene length: 648

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 13/02/2 (OVI)	ZIM02-AM	465	465	0	100	0
2	SAT2/ZIM/15/2002	ZIM02-15	648	648	0	100	0
3	SAT2/ZIM/14/2002	ZIM02-14	648	647	0	99.85	0.15
4	SAT2/ZIM/12/2002	ZIM02-12	648	647	0	99.85	0.15
5	SAT2/ZIM 11/02/2 (OVI)	ZIM02-AK	486	485	0	99.79	0.21
6	SAT2/ZIM 12/02/2 (OVI)	ZIM02-AL	474	473	0	99.79	0.21
7	SAT2/ZIM/5/2003	ZIM03-05	648	640	0	98.77	1.23
8	SAT2/ZIM/16/2003	ZIM03-16	648	640	0	98.77	1.23
9	SAT2/ZIM/18/2003	ZIM03-18	648	640	0	98.77	1.23
10	SAT2/ZIM/19/2003	ZIM03-19	648	640	0	98.77	1.23

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	525	0	81.02	18.98
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	153	6	77.27	22.73
4	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
5	SAT2/ZIM/9/89	ZIM89-09	218	163	1	74.77	25.23
6	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	484	0	74.69	25.31
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	462	0	71.3	28.7
8	SAT2/KEN/3/57	KEN57-03	648	455	0	70.22	29.78

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004						
WRL Ref No: ZIM/14/2002							
Date collected: Aug. 2002							
Date received: 17/05/2004							
Species: Bovine	Topotype: none defined						
Material used: IRPI2 BTy1	Genotype/strain: none designated						
Region sequenced: VP1	Sequence filename: ZIM02-14.SEQ						
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 02/12/2004						
No. of Nt determined: 648	Total no. of comparisons: 305						
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/ZIM/12/2002	ZIM02-12	648	648	0	100	0
2	SAT2/ZIM 11/02/2 (OVI)	ZIM02-AK	486	486	0	100	0
3	SAT2/ZIM 12/02/2 (OVI)	ZIM02-AL	474	474	0	100	0
4	SAT2/ZIM/13/2002	ZIM02-13	648	647	0	99.85	0.15
5	SAT2/ZIM/15/2002	ZIM02-15	648	647	0	99.85	0.15
6	SAT2/ZIM 13/02/2 (OVI)	ZIM02-AM	465	464	0	99.78	0.22
7	SAT2/ZIM/5/2003	ZIM03-05	648	641	0	98.92	1.08
8	SAT2/ZIM/16/2003	ZIM03-16	648	641	0	98.92	1.08
9	SAT2/ZIM/18/2003	ZIM03-18	648	641	0	98.92	1.08
10	SAT2/ZIM/19/2003	ZIM03-19	648	641	0	98.92	1.08
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	526	0	81.17	18.83
2	SAT2/K52/84 (Kenya)	KEN84K52	418	327	0	78.23	21.77
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	153	6	77.27	22.73
4	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	496	0	76.54	23.46
5	SAT2/ZIM/9/89	ZIM89-09	218	163	1	74.77	25.23
6	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	463	0	71.45	28.55
8	SAT2/KEN/3/57	KEN57-03	648	456	0	70.37	29.63
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/15/2002	
Date collected: Aug. 2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-15.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 02/12/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM 13/02/2 (OVI)	ZIM02-AM	465	465	0	100	0
2	SAT2/ZIM/13/2002	ZIM02-13	648	648	0	100	0
3	SAT2/ZIM/14/2002	ZIM02-14	648	647	0	99.85	0.15
4	SAT2/ZIM/12/2002	ZIM02-12	648	647	0	99.85	0.15
5	SAT2/ZIM 11/02/2 (OVI)	ZIM02-AK	486	485	0	99.79	0.21
6	SAT2/ZIM 12/02/2 (OVI)	ZIM02-AL	474	473	0	99.79	0.21
7	SAT2/ZIM/5/2003	ZIM03-05	648	640	0	98.77	1.23
8	SAT2/ZIM/16/2003	ZIM03-16	648	640	0	98.77	1.23
9	SAT2/ZIM/18/2003	ZIM03-18	648	640	0	98.77	1.23
10	SAT2/ZIM/19/2003	ZIM03-19	648	640	0	98.77	1.23

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	525	0	81.02	18.98
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	153	6	77.27	22.73
4	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
5	SAT2/ZIM/9/89	ZIM89-09	218	163	1	74.77	25.23
6	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	484	0	74.69	25.31
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	462	0	71.3	28.7
8	SAT2/KEN/3/57	KEN57-03	648	455	0	70.22	29.78

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/16/2002	
Date collected: 23/04/2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-16.SEQ
RT-PCR primers: SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 23/08/2004
No. of Nt determined: 648	Total no. of comparisons: 305
No. of ambiguities: 0	Min. no. of nt for comparison: 300
Gene length: 648	

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/6/2002	ZIM02-06	648	648	0	100	0
2	SAT2/ZIM/7/2002	ZIM02-07	648	648	0	100	0
3	SAT2/ZIM 1/02/2 (OVI)	ZIM02-AA	417	417	0	100	0
4	SAT2/ZIM/5/2002	ZIM02-05	648	648	0	100	0
5	SAT2/ZIM 3/02/2 (OVI)	ZIM02-AC	417	417	0	100	0
6	SAT2/ZIM 2/02/2 (OVI)	ZIM02-AB	414	414	0	100	0
7	SAT2/ZIM/1/2001	ZIM01-01	648	637	0	98.3	1.7
8	SAT2/ZIM/1/2001 [OVI]	ZIM01A01	384	377	0	98.18	1.82
9	SAT2/ZIM/2/2001	ZIM01-02	648	635	0	97.99	2.01
10	SAT2/BOT/11/2002	BOT02-11	384	374	0	97.4	2.6

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/9/89	ZIM89-09	218	175	1	80.28	19.72
2	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	519	0	80.09	19.91
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	488	0	75.31	24.69
4	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	487	0	75.15	24.85
5	SAT2/K52/84 (Kenya)	KEN84K52	418	311	0	74.4	25.6
6	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	147	6	74.24	25.76
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	465	0	71.76	28.24
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/17/2002	
Date collected: 08/06/2002	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM02-17.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R; SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 08/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM 4/02/2 (OVI)	ZIM02-AD	416	416	0	100	0
2	SAT2/ZIM/9/2002	ZIM02-09	648	647	0	99.85	0.15
3	SAT2/ZIM/8/2002	ZIM02-08	648	647	0	99.85	0.15
4	SAT2/ZIM 5/02/2 (OVI)	ZIM02-AE	419	418	0	99.76	0.24
5	SAT2/ZIM 6/02/2 (OVI)	ZIM02-AF	416	415	0	99.76	0.24
6	SAT2/ZIM 7/02/2 (OVI)	ZIM02-AG	414	413	0	99.76	0.24
7	SAT2/ZIM 8/02/2 (OVI)	ZIM02-AH	390	389	0	99.74	0.26
8	SAT2/ZIM/13/2001 [OVI]	ZIM01A13	412	404	7	98.06	1.94
9	SAT2/ZIM/4/97	ZIM97-04	413	365	5	88.38	11.62
10	SAT2/ZIM/2/97	ZIM97-02	412	364	5	88.35	11.65

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	580	0	89.51	10.49
2	SAT2/ZIM/9/89	ZIM89-09	218	187	1	85.78	14.22
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	488	0	75.31	24.69
4	SAT2/K52/84 (Kenya)	KEN84K52	418	314	0	75.12	24.88
5	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	147	6	74.24	25.76
6	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	476	0	73.46	26.54
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	463	0	71.45	28.55
8	SAT2/KEN/3/57	KEN57-03	648	454	0	70.06	29.94

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004						
WRL Ref No: ZIM/18/2002							
Date collected: 19/08/2002							
Date received: 17/05/2004							
Species: Bovine	Topotype: none defined						
Material used: IRPI2 BTy1	Genotype/strain: none designated						
Region sequenced: VP1	Sequence filename: ZIM02-18.SEQ						
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 30/06/2004						
No. of Nt determined: 648	Total no. of comparisons: 305						
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/ZIM/12/2003	ZIM03-12	648	648	0	100	0
2	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
3	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
4	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
7	SAT2/ZIM/11/2003	ZIM03-11	648	648	0	100	0
8	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT1/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/1/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Bovine	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-01.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 09/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/22/2003	ZIM03-22	648	648	0	100	0
2	SAT2/ZIM/18/2003	ZIM03-18	648	648	0	100	0
3	SAT2/MOZ/1/2002	MOZ02-01	648	648	0	100	0
4	SAT2/ZIM/5/2003	ZIM03-05	648	648	0	100	0
5	SAT2/ZIM/16/2003	ZIM03-16	648	648	0	100	0
6	SAT2/ZIM/9/2003	ZIM03-09	648	648	0	100	0
7	SAT2/ZIM/19/2003	ZIM03-19	648	648	0	100	0
8	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
9	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
10	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	522	0	80.56	19.44
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2		Report date: 07/12/2004					
WRL Ref No: ZIM/2/2003							
Date collected: Not known							
Date received: 17/05/2004							
Species: Bovine		Topotype: none defined					
Material used: IRPI2 BTy1		Genotype/strain: none designated					
Region sequenced: VP1		Sequence filename: ZIM03-02.SEQ					
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R; SAT2VP3-AB/SAT-2B208R		Date sequence last updated: 01/07/2004					
No. of Nt determined: 648		Total no. of comparisons: 305					
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/ZIM/3/2003	ZIM03-03	648	648	0	100	0
2	SAT2/ZIM/20/2003	ZIM03-20	648	648	0	100	0
3	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
4	SAT2/ZIM/1/2003	ZIM03-01	648	646	0	99.69	0.31
5	SAT2/ZIM/12/2003	ZIM03-12	648	646	0	99.69	0.31
6	SAT2/ZIM/7/2003	ZIM03-07	648	646	0	99.69	0.31
7	SAT2/ZIM/8/2003	ZIM03-08	648	646	0	99.69	0.31
8	SAT2/ZIM/5/2003	ZIM03-05	648	646	0	99.69	0.31
9	SAT2/ZIM/11/2003	ZIM03-11	648	646	0	99.69	0.31
10	SAT2/ZIM/17/2003	ZIM03-17	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	329	0	78.71	21.29
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
4	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	496	0	76.54	23.46
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	162	1	74.31	25.69
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	466	0	71.91	28.09
8	SAT2/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/3/2003
Date collected: Not known
Date received: 17/05/2004
Species: Not known
Material used: IRPI2 BTy1
Region sequenced: VP1
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R;
SAT2VP3-AB/SAT-2B208R
No. of Nt determined: 648
No. of ambiguities: 0
Gene length: 648

Report date: 07/12/2004
Topotype: none defined
Genotype/strain: none designated
Sequence filename: ZIM03-03.SEQ
Date sequence last updated:
16/11/2004
Total no. of comparisons: 305
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/2/2003	ZIM03-02	648	648	0	100	0
2	SAT2/ZIM/20/2003	ZIM03-20	648	648	0	100	0
3	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
4	SAT2/ZIM/1/2003	ZIM03-01	648	646	0	99.69	0.31
5	SAT2/ZIM/12/2003	ZIM03-12	648	646	0	99.69	0.31
6	SAT2/ZIM/7/2003	ZIM03-07	648	646	0	99.69	0.31
7	SAT2/ZIM/8/2003	ZIM03-08	648	646	0	99.69	0.31
8	SAT2/ZIM/5/2003	ZIM03-05	648	646	0	99.69	0.31
9	SAT2/ZIM/11/2003	ZIM03-11	648	646	0	99.69	0.31
10	SAT2/ZIM/17/2003	ZIM03-17	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	329	0	78.71	21.29
3	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
4	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	496	0	76.54	23.46
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	162	1	74.31	25.69
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	466	0	71.91	28.09
8	SAT2/KEN/3/57	KEN57-03	648	459	0	70.83	29.17

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/5/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-05.SEQ
RT-PCR primers: SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 22/11/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/22/2003	ZIM03-22	648	648	0	100	0
2	SAT2/ZIM/1/2003	ZIM03-01	648	648	0	100	0
3	SAT2/MOZ/1/2002	MOZ02-01	648	648	0	100	0
4	SAT2/ZIM/16/2003	ZIM03-16	648	648	0	100	0
5	SAT2/ZIM/19/2003	ZIM03-19	648	648	0	100	0
6	SAT2/ZIM/18/2003	ZIM03-18	648	648	0	100	0
7	SAT2/ZIM/9/2003	ZIM03-09	648	648	0	100	0
8	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
9	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
10	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	522	0	80.56	19.44
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides
*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/6/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-06.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R; SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 27/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/5/2003	ZIM03-05	648	647	0	99.85	0.15
2	SAT2/ZIM/1/2003	ZIM03-01	648	647	0	99.85	0.15
3	SAT2/ZIM/2/2003	ZIM03-02	648	647	0	99.85	0.15
4	SAT2/ZIM/3/2003	ZIM03-03	648	647	0	99.85	0.15
5	SAT2/ZIM/22/2003	ZIM03-22	648	647	0	99.85	0.15
6	SAT2/ZIM/18/2003	ZIM03-18	648	647	0	99.85	0.15
7	SAT2/ZIM/19/2003	ZIM03-19	648	647	0	99.85	0.15
8	SAT2/ZIM/9/2003	ZIM03-09	648	647	0	99.85	0.15
9	SAT2/ZIM/16/2003	ZIM03-16	648	647	0	99.85	0.15
10	SAT2/MOZ/1/2002	MOZ02-01	648	647	0	99.85	0.15

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	523	0	80.71	19.29
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	484	0	74.69	25.31
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	465	0	71.76	28.24
8	SAT2/KEN/3/57	KEN57-03	648	458	0	70.68	29.32

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2		Report date: 07/12/2004					
WRL Ref No: ZIM/7/2003							
Date collected: Not known							
Date received: 17/05/2004							
Species: Not known		Topotype: none defined					
Material used: IRPI2 BTy1		Genotype/strain: none designated					
Region sequenced: VP1		Sequence filename: ZIM03-07.SEQ					
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R		Date sequence last updated: 23/09/2004					
No. of Nt determined: 648		Total no. of comparisons: 305					
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/ZIM/12/2003	ZIM03-12	648	648	0	100	0
2	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
3	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
4	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
7	SAT2/ZIM/11/2003	ZIM03-11	648	648	0	100	0
8	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
9	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
10	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/8/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-08.SEQ
RT-PCR primers: SAT2VP3-AB/SAT-2B208R	Date sequence last updated: 27/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/12/2003	ZIM03-12	648	648	0	100	0
2	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
3	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
4	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
7	SAT2/ZIM/11/2003	ZIM03-11	648	648	0	100	0
8	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
9	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
10	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004						
WRL Ref No: ZIM/9/2003							
Date collected: Not known							
Date received: 17/05/2004							
Species: Not known	Topotype: none defined						
Material used: IRPI2 BTy1	Genotype/strain: none designated						
Region sequenced: VP1	Sequence filename: ZIM03-09.SEQ						
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 27/09/2004						
No. of Nt determined: 648	Total no. of comparisons: 305						
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/ZIM/5/2003	ZIM03-05	648	648	0	100	0
2	SAT2/ZIM/1/2003	ZIM03-01	648	648	0	100	0
3	SAT2/MOZ/1/2002	MOZ02-01	648	648	0	100	0
4	SAT2/ZIM/16/2003	ZIM03-16	648	648	0	100	0
5	SAT2/ZIM/22/2003	ZIM03-22	648	648	0	100	0
6	SAT2/ZIM/18/2003	ZIM03-18	648	648	0	100	0
7	SAT2/ZIM/19/2003	ZIM03-19	648	648	0	100	0
8	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
9	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	522	0	80.56	19.44
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/11/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-11.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 28/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/12/2003	ZIM03-12	648	648	0	100	0
2	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
3	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
4	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
7	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
8	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004						
WRL Ref No: ZIM/12/2003							
Date collected: Not known							
Date received: 17/05/2004	Topotype: none defined						
Species: Not known	Genotype/strain: none designated						
Material used: IRPI2 BTy1	Sequence filename: ZIM03-12.SEQ						
Region sequenced: VP1	Date sequence last updated: 16/11/2004						
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Total no. of comparisons: 305						
No. of Nt determined: 648	Min. no. of nt for comparison: 300						
No. of ambiguities: 0							
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/ZIM/11/2003	ZIM03-11	648	648	0	100	0
2	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
3	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
4	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
7	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
8	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/14/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-14.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 16/11/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/11/2003	ZIM03-11	648	648	0	100	0
2	SAT2/ZIM/12/2003	ZIM03-12	648	648	0	100	0
3	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
4	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
7	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
8	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004						
WRL Ref No: ZIM/15/2003							
Date collected: Not known							
Date received: 17/05/2004	Topotype: none defined						
Species: Not known	Genotype/strain: none designated						
Material used: IRPI2 BTy1	Sequence filename: ZIM03-15.SEQ						
Region sequenced: VP1	Date sequence last updated: 23/09/2004						
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Total no. of comparisons: 305						
No. of Nt determined: 648	Min. no. of nt for comparison: 300						
No. of ambiguities: 0							
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/ZIM/11/2003	ZIM03-11	648	648	0	100	0
2	SAT2/ZIM/12/2003	ZIM03-12	648	648	0	100	0
3	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
4	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
5	SAT2/ZIM/17/2003	ZIM03-17	648	648	0	100	0
6	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
7	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
8	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/16/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-16.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 27/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/5/2003	ZIM03-05	648	648	0	100	0
2	SAT2/ZIM/1/2003	ZIM03-01	648	648	0	100	0
3	SAT2/MOZ/1/2002	MOZ02-01	648	648	0	100	0
4	SAT2/ZIM/18/2003	ZIM03-18	648	648	0	100	0
5	SAT2/ZIM/9/2003	ZIM03-09	648	648	0	100	0
6	SAT2/ZIM/22/2003	ZIM03-22	648	648	0	100	0
7	SAT2/ZIM/19/2003	ZIM03-19	648	648	0	100	0
8	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	522	0	80.56	19.44
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2		Report date: 07/12/2004					
WRL Ref No: ZIM/17/2003							
Date collected: Not known							
Date received: 17/05/2004		Topotype: none defined					
Species: Not known		Genotype/strain: none designated					
Material used: IRPI2 BTy1		Sequence filename: ZIM03-17.SEQ					
Region sequenced: VP1		Date sequence last updated: 27/09/2004					
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R		Total no. of comparisons: 305					
No. of Nt determined: 648		Min. no. of nt for comparison: 300					
No. of ambiguities: 0							
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/ZIM/11/2003	ZIM03-11	648	648	0	100	0
2	SAT2/ZIM/12/2003	ZIM03-12	648	648	0	100	0
3	SAT2/ZIM/14/2003	ZIM03-14	648	648	0	100	0
4	SAT2/ZIM/15/2003	ZIM03-15	648	648	0	100	0
5	SAT2/ZIM/18/2002	ZIM02-18	648	648	0	100	0
6	SAT2/ZIM/8/2003	ZIM03-08	648	648	0	100	0
7	SAT2/ZIM/7/2003	ZIM03-07	648	648	0	100	0
8	SAT2/ZIM/20/2003	ZIM03-20	648	646	0	99.69	0.31
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	524	0	80.86	19.14
2	SAT2/K52/84 (Kenya)	KEN84K52	418	331	0	79.19	20.81
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	498	0	76.85	23.15
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	152	6	76.77	23.23
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	485	0	74.85	25.15
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	467	0	72.07	27.93
8	SAT2/KEN/3/57	KEN57-03	648	460	0	70.99	29.01
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/18/2003	
Date collected: Not known	
Date received: 17/05/2004	Topotype: none defined
Species: Not known	Genotype/strain: none designated
Material used: IRPI2 BTy1	Sequence filename: ZIM03-18.SEQ
Region sequenced: VP1	Date sequence last updated: 23/09/2004
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Total no. of comparisons: 305
No. of Nt determined: 648	Min. no. of nt for comparison: 300
No. of ambiguities: 0	
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/ZIM/5/2003	ZIM03-05	648	648	0	100	0
2	SAT2/ZIM/1/2003	ZIM03-01	648	648	0	100	0
3	SAT2/MOZ/1/2002	MOZ02-01	648	648	0	100	0
4	SAT2/ZIM/16/2003	ZIM03-16	648	648	0	100	0
5	SAT2/ZIM/9/2003	ZIM03-09	648	648	0	100	0
6	SAT2/ZIM/22/2003	ZIM03-22	648	648	0	100	0
7	SAT2/ZIM/19/2003	ZIM03-19	648	648	0	100	0
8	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	522	0	80.56	19.44
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/KEN/3/57	KEN57-03	648	457	0	70.52	29.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 07/12/2004
WRL Ref No: ZIM/19/2003	
Date collected: Not known	
Date received: 17/05/2004	
Species: Not known	Topotype: none defined
Material used: IRPI2 BTy1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: ZIM03-19.SEQ
RT-PCR primers: SAT2-P1-1223F/SAT-2B208R	Date sequence last updated: 23/09/2004
No. of Nt determined: 648	Total no. of comparisons: 305
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/ZIM/5/2003	ZIM03-05	648	648	0	100	0
2	SAT2/ZIM/1/2003	ZIM03-01	648	648	0	100	0
3	SAT2/MOZ/1/2002	MOZ02-01	648	648	0	100	0
4	SAT2/ZIM/16/2003	ZIM03-16	648	648	0	100	0
5	SAT2/ZIM/9/2003	ZIM03-09	648	648	0	100	0
6	SAT2/ZIM/22/2003	ZIM03-22	648	648	0	100	0
7	SAT2/ZIM/18/2003	ZIM03-18	648	648	0	100	0
8	SAT2/ZIM/6/2003	ZIM03-06	648	647	0	99.85	0.15
9	SAT2/ZIM/3/2003	ZIM03-03	648	646	0	99.69	0.31
10	SAT2/ZIM/2/2003	ZIM03-02	648	646	0	99.69	0.31

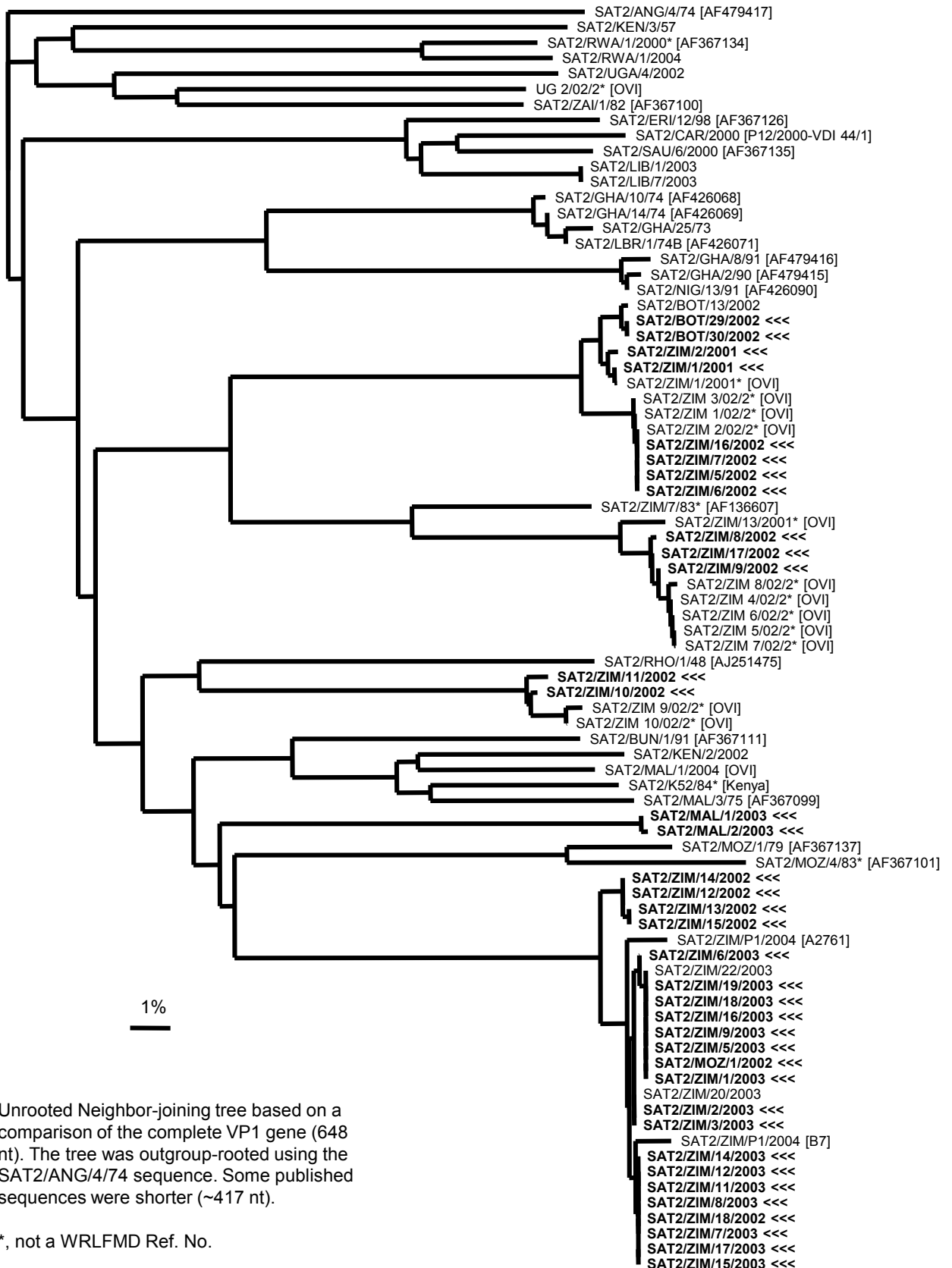
Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/RSA/106/59 [AY593848]	RSA59--A	648	522	0	80.56	19.44
2	SAT2/K52/84 (Kenya)	KEN84K52	418	328	0	78.47	21.53
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	495	0	76.39	23.61
4	SAT2/ZAM/3/81 (OVI)	ZAM81V03	198	151	6	76.26	23.74
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	483	0	74.54	25.46
6	SAT2/ZIM/9/89	ZIM89-09	218	161	1	73.85	26.15
7	SAT2/KEN/11/60 [AY593849]	KEN60--A	648	464	0	71.6	28.4
8	SAT2/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 received from the Botswana Vaccine Institute during 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 (~417 nt).

* , not a WRLFMD Ref. No.