

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/2/2007	Reported by: N.J. Knowles
Sender Ref: VRD/07/518	Checked by: D.P. King
Date collected: 01/09/2007	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG07-02.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/5/2008	NIG08-05	648	648	0	100	0
2	SAT2/NIG/6/2008	NIG08-06	648	646	0	99.69	0.31
3	SAT2/NIG/7/2008	NIG08-07	648	646	0	99.69	0.31
4	SAT2/NIG/1/2008	NIG08-01	648	641	0	98.92	1.08
5	SAT2/NIG/2/2008	NIG08-02	648	641	0	98.92	1.08
6	SAT2/NIG/3/2008	NIG08-03	648	641	0	98.92	1.08
7	SAT2/NIG/4/2008	NIG08-04	648	641	0	98.92	1.08
8	SAT2/NIG/8/2008	NIG08-08	648	641	0	98.92	1.08
9	SAT2/SUD/1/2007	SUD07-01	648	616	0	95.06	4.94
10	SAT2/NGR/15/2005	NGR05-15	648	601	0	92.75	7.25

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	591	1	91.34	8.66
2	SAT2/KEN/3/57	KEN57-03	648	476	0	73.46	26.54
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	467	0	72.07	27.93
4	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	458	0	70.68	29.32
5	SAT2/SA/106/59 (AY593848)	RSA59--A	648	457	0	70.52	29.48
6	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	456	0	70.37	29.63
7	SAT2/K183/74 (Kenya)	KEN74183	648	455	0	70.22	29.78
8	SAT2/K52/84 (Kenya)	KEN84K52	648	455	0	70.22	29.78
9	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	453	0	69.91	30.09
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	448	0	69.14	30.86

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/1/2008	Reported by: N.J. Knowles
Sender Ref: VTD/08/18 A-F	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-01.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/2/2008	NIG08-02	648	648	0	100	0
2	SAT2/NIG/3/2008	NIG08-03	648	648	0	100	0
3	SAT2/NIG/8/2008	NIG08-08	648	648	0	100	0
4	SAT2/NIG/4/2008	NIG08-04	648	646	0	99.69	0.31
5	SAT2/NIG/2/2007	NIG07-02	648	641	0	98.92	1.08
6	SAT2/NIG/5/2008	NIG08-05	648	641	0	98.92	1.08
7	SAT2/NIG/6/2008	NIG08-06	648	639	0	98.61	1.39
8	SAT2/NIG/7/2008	NIG08-07	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	617	0	95.22	4.78
10	SAT2/NGR/15/2005	NGR05-15	648	602	0	92.9	7.1

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	592	1	91.5	8.5
2	SAT2/KEN/3/57	KEN57-03	648	474	0	73.15	26.85
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	465	0	71.76	28.24
4	SAT2/SA/106/59 (AY593848)	RSA59--A	648	458	0	70.68	29.32
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	458	0	70.68	29.32
6	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
7	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	454	0	70.06	29.94
8	SAT2/K183/74 (Kenya)	KEN74183	648	451	0	69.6	30.4
9	SAT2/K52/84 (Kenya)	KEN84K52	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	444	0	68.52	31.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/2/2008	Reported by: N.J. Knowles
Sender Ref: VTD/08/18 A-F	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-02.SEQ
Material used: BTy2	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/1/2008	NIG08-01	648	648	0	100	0
2	SAT2/NIG/3/2008	NIG08-03	648	648	0	100	0
3	SAT2/NIG/8/2008	NIG08-08	648	648	0	100	0
4	SAT2/NIG/4/2008	NIG08-04	648	646	0	99.69	0.31
5	SAT2/NIG/2/2007	NIG07-02	648	641	0	98.92	1.08
6	SAT2/NIG/5/2008	NIG08-05	648	641	0	98.92	1.08
7	SAT2/NIG/6/2008	NIG08-06	648	639	0	98.61	1.39
8	SAT2/NIG/7/2008	NIG08-07	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	617	0	95.22	4.78
10	SAT2/NGR/15/2005	NGR05-15	648	602	0	92.9	7.1

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	592	1	91.5	8.5
2	SAT2/KEN/3/57	KEN57-03	648	474	0	73.15	26.85
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	465	0	71.76	28.24
4	SAT2/SA/106/59 (AY593848)	RSA59--A	648	458	0	70.68	29.32
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	458	0	70.68	29.32
6	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
7	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	454	0	70.06	29.94
8	SAT2/K183/74 (Kenya)	KEN74183	648	451	0	69.6	30.4
9	SAT2/K52/84 (Kenya)	KEN84K52	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	444	0	68.52	31.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/3/2008	Reported by: N.J. Knowles
Sender Ref: VTD/08/18 A-F	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-03.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/1/2008	NIG08-01	648	648	0	100	0
2	SAT2/NIG/2/2008	NIG08-02	648	648	0	100	0
3	SAT2/NIG/8/2008	NIG08-08	648	648	0	100	0
4	SAT2/NIG/4/2008	NIG08-04	648	646	0	99.69	0.31
5	SAT2/NIG/2/2007	NIG07-02	648	641	0	98.92	1.08
6	SAT2/NIG/5/2008	NIG08-05	648	641	0	98.92	1.08
7	SAT2/NIG/6/2008	NIG08-06	648	639	0	98.61	1.39
8	SAT2/NIG/7/2008	NIG08-07	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	617	0	95.22	4.78
10	SAT2/NGR/15/2005	NGR05-15	648	602	0	92.9	7.1

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	592	1	91.5	8.5
2	SAT2/KEN/3/57	KEN57-03	648	474	0	73.15	26.85
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	465	0	71.76	28.24
4	SAT2/SA/106/59 (AY593848)	RSA59--A	648	458	0	70.68	29.32
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	458	0	70.68	29.32
6	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
7	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	454	0	70.06	29.94
8	SAT2/K183/74 (Kenya)	KEN74183	648	451	0	69.6	30.4
9	SAT2/K52/84 (Kenya)	KEN84K52	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	444	0	68.52	31.48

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/4/2008	Reported by: N.J. Knowles
Sender Ref: VTD/08/18 A-F	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-04.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/1/2008	NIG08-01	648	646	0	99.69	0.31
2	SAT2/NIG/2/2008	NIG08-02	648	646	0	99.69	0.31
3	SAT2/NIG/3/2008	NIG08-03	648	646	0	99.69	0.31
4	SAT2/NIG/8/2008	NIG08-08	648	646	0	99.69	0.31
5	SAT2/NIG/2/2007	NIG07-02	648	641	0	98.92	1.08
6	SAT2/NIG/5/2008	NIG08-05	648	641	0	98.92	1.08
7	SAT2/NIG/6/2008	NIG08-06	648	639	0	98.61	1.39
8	SAT2/NIG/7/2008	NIG08-07	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	617	0	95.22	4.78
10	SAT2/NGR/15/2005	NGR05-15	648	602	0	92.9	7.1

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	592	1	91.5	8.5
2	SAT2/KEN/3/57	KEN57-03	648	476	0	73.46	26.54
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	466	0	71.91	28.09
4	SAT2/SA/106/59 (AY593848)	RSA59--A	648	460	0	70.99	29.01
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	460	0	70.99	29.01
6	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	456	0	70.37	29.63
7	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
8	SAT2/K52/84 (Kenya)	KEN84K52	648	453	0	69.91	30.09
9	SAT2/K183/74 (Kenya)	KEN74183	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	445	0	68.67	31.33

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/5/2008	Reported by: N.J. Knowles
Sender Ref: VRD/08/40	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-05.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/2/2007	NIG07-02	648	648	0	100	0
2	SAT2/NIG/6/2008	NIG08-06	648	646	0	99.69	0.31
3	SAT2/NIG/7/2008	NIG08-07	648	646	0	99.69	0.31
4	SAT2/NIG/1/2008	NIG08-01	648	641	0	98.92	1.08
5	SAT2/NIG/2/2008	NIG08-02	648	641	0	98.92	1.08
6	SAT2/NIG/3/2008	NIG08-03	648	641	0	98.92	1.08
7	SAT2/NIG/4/2008	NIG08-04	648	641	0	98.92	1.08
8	SAT2/NIG/8/2008	NIG08-08	648	641	0	98.92	1.08
9	SAT2/SUD/1/2007	SUD07-01	648	616	0	95.06	4.94
10	SAT2/NGR/15/2005	NGR05-15	648	601	0	92.75	7.25

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	591	1	91.34	8.66
2	SAT2/KEN/3/57	KEN57-03	648	476	0	73.46	26.54
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	467	0	72.07	27.93
4	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	458	0	70.68	29.32
5	SAT2/SA/106/59 (AY593848)	RSA59--A	648	457	0	70.52	29.48
6	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	456	0	70.37	29.63
7	SAT2/K183/74 (Kenya)	KEN74183	648	455	0	70.22	29.78
8	SAT2/K52/84 (Kenya)	KEN84K52	648	455	0	70.22	29.78
9	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	453	0	69.91	30.09
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	448	0	69.14	30.86

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/6/2008	Reported by: N.J. Knowles
Sender Ref: VRD/08/40	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-06.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/7/2008	NIG08-07	648	648	0	100	0
2	SAT2/NIG/2/2007	NIG07-02	648	646	0	99.69	0.31
3	SAT2/NIG/5/2008	NIG08-05	648	646	0	99.69	0.31
4	SAT2/NIG/1/2008	NIG08-01	648	639	0	98.61	1.39
5	SAT2/NIG/2/2008	NIG08-02	648	639	0	98.61	1.39
6	SAT2/NIG/3/2008	NIG08-03	648	639	0	98.61	1.39
7	SAT2/NIG/4/2008	NIG08-04	648	639	0	98.61	1.39
8	SAT2/NIG/8/2008	NIG08-08	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	614	0	94.75	5.25
10	SAT2/NGR/15/2005	NGR05-15	648	601	0	92.75	7.25

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	591	1	91.34	8.66
2	SAT2/KEN/3/57	KEN57-03	648	476	0	73.46	26.54
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	467	0	72.07	27.93
4	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
5	SAT2/K183/74 (Kenya)	KEN74183	648	455	0	70.22	29.78
6	SAT2/K52/84 (Kenya)	KEN84K52	648	455	0	70.22	29.78
7	SAT2/SA/106/59 (AY593848)	RSA59--A	648	455	0	70.22	29.78
8	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	454	0	70.06	29.94
9	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	446	0	68.83	31.17

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/7/2008	Reported by: N.J. Knowles
Sender Ref: VRD/08/40	Checked by: D.P. King
Date collected: 01/01/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-07.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/6/2008	NIG08-06	648	648	0	100	0
2	SAT2/NIG/2/2007	NIG07-02	648	646	0	99.69	0.31
3	SAT2/NIG/5/2008	NIG08-05	648	646	0	99.69	0.31
4	SAT2/NIG/1/2008	NIG08-01	648	639	0	98.61	1.39
5	SAT2/NIG/2/2008	NIG08-02	648	639	0	98.61	1.39
6	SAT2/NIG/3/2008	NIG08-03	648	639	0	98.61	1.39
7	SAT2/NIG/4/2008	NIG08-04	648	639	0	98.61	1.39
8	SAT2/NIG/8/2008	NIG08-08	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	614	0	94.75	5.25
10	SAT2/NGR/15/2005	NGR05-15	648	601	0	92.75	7.25

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	591	1	91.34	8.66
2	SAT2/KEN/3/57	KEN57-03	648	476	0	73.46	26.54
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	467	0	72.07	27.93
4	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
5	SAT2/K183/74 (Kenya)	KEN74183	648	455	0	70.22	29.78
6	SAT2/K52/84 (Kenya)	KEN84K52	648	455	0	70.22	29.78
7	SAT2/SA/106/59 (AY593848)	RSA59--A	648	455	0	70.22	29.78
8	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	454	0	70.06	29.94
9	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	446	0	68.83	31.17

nt, nucleotides

*, not a WRLFMD reference number

Serotype: SAT2	Report date: 05/08/2008
WRL Ref No: NIG/8/2008	Reported by: N.J. Knowles
Sender Ref: VRD/08/70	Checked by: D.P. King
Date collected: 01/02/2008	
Date received by WRLFMD: 20/05/2008	Topotype: none defined
Date received for sequencing: 09/06/2008	Genotype/strain: none designated
Species: Cattle	Sequence filename: NIG08-08.SEQ
Material used: BTy1	Date sequence last updated: 02/08/2008
Region sequenced: VP1	Total no. of comparisons: 435
RT-PCR primers: SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 300
No. of Nt determined: 648	Total turn-around time: 77 days
No. of ambiguities: 0	Sequencing time: 57 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/NIG/1/2008	NIG08-01	648	648	0	100	0
2	SAT2/NIG/2/2008	NIG08-02	648	648	0	100	0
3	SAT2/NIG/3/2008	NIG08-03	648	648	0	100	0
4	SAT2/NIG/4/2008	NIG08-04	648	646	0	99.69	0.31
5	SAT2/NIG/2/2007	NIG07-02	648	641	0	98.92	1.08
6	SAT2/NIG/5/2008	NIG08-05	648	641	0	98.92	1.08
7	SAT2/NIG/6/2008	NIG08-06	648	639	0	98.61	1.39
8	SAT2/NIG/7/2008	NIG08-07	648	639	0	98.61	1.39
9	SAT2/SUD/1/2007	SUD07-01	648	617	0	95.22	4.78
10	SAT2/NGR/15/2005	NGR05-15	648	602	0	92.9	7.1

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	SAT2/SAU/6/2000 [AF367135]	SAU00A06	647	592	1	91.5	8.5
2	SAT2/KEN/3/57	KEN57-03	648	474	0	73.15	26.85
3	SAT2/RHO/1/48 [AJ251475]	ZAM48A01	648	465	0	71.76	28.24
4	SAT2/SA/106/59 (AY593848)	RSA59--A	648	458	0	70.68	29.32
5	SAT2/ZIM/7/83 [AF136607]	ZIM83A07	648	458	0	70.68	29.32
6	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	456	0	70.37	29.63
7	SAT2/ANG/4/74 [AF479417]	ANG74-04	648	454	0	70.06	29.94
8	SAT2/K183/74 (Kenya)	KEN74183	648	451	0	69.6	30.4
9	SAT2/K52/84 (Kenya)	KEN84K52	648	451	0	69.6	30.4
10	SAT2/GAM/8/79 [AF479410]	GAM79-08	648	444	0	68.52	31.48

nt, nucleotides

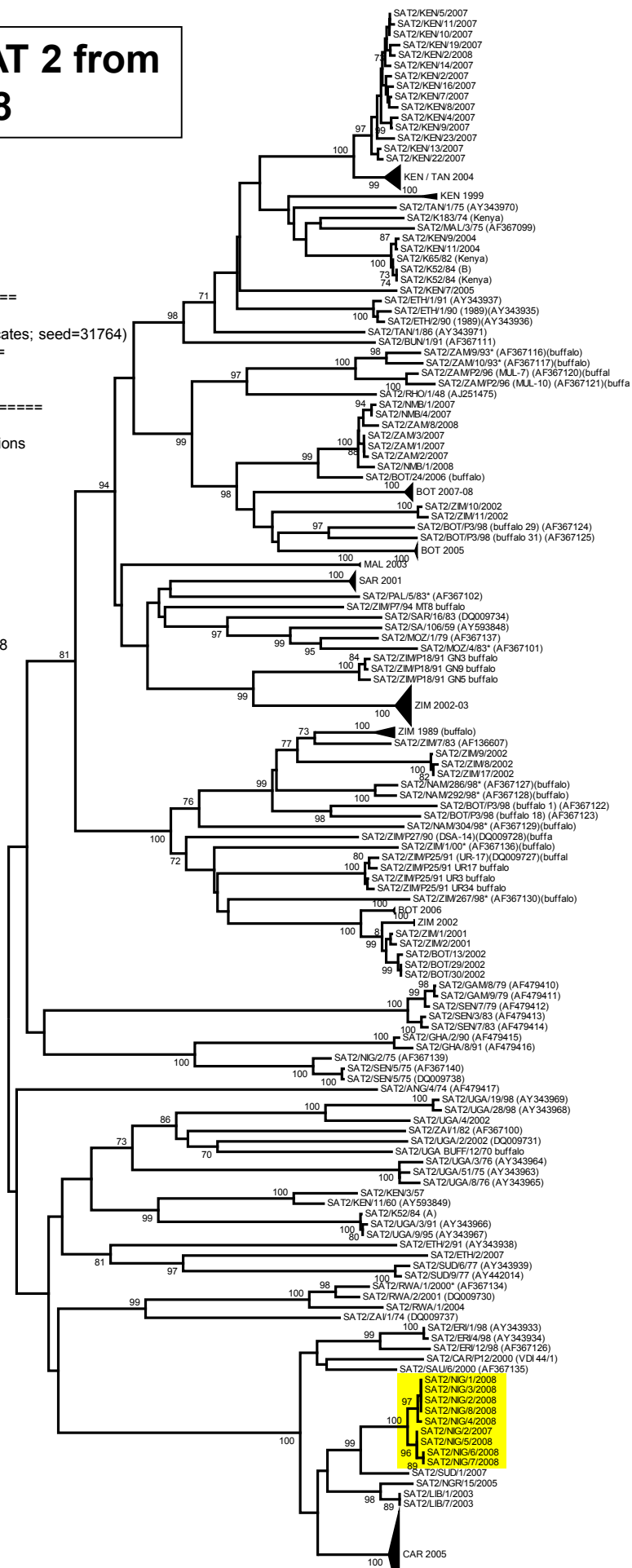
*, not a WRLFMD reference number

Report on FMDV SAT 2 from Nigeria in 2007-2008

Software: MEGA 4.0
 No. of Taxa : 262
 Data File : n:\levd\megdb\fmdv\sat2\KEN2008a.meg
 Data Title : SAT 2
 Data Type : Nucleotide (Coding)
 Analysis : Phylogeny reconstruction
 Tree Inference : =====
 ->Method : Neighbor-Joining
 ->Phylogeny Test and options : Bootstrap (1000 replicates; seed=31764)
 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

* , not a WRLFMD Ref. No.

N.J. Knowles, K. Ebert & J. Wadsworth, 5 August 2008



0.05