

# FAO World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD)

## Genotyping Report

Report Date for this Batch: 6 November 2014

FMDV type SAT 2

Country: Botswana

Period: 2013

No. of samples: 2

BATCH: WRLFMD/2014/00031



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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

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Serotype: SAT2	Report date: 06/11/2014
WRLFMD Ref No: BOT/1/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00031	Checked by: K. Bachanek-Bankowska
Sender Ref: BOT 1/13	
Location: Maun, North-West District, Botswana	Topotype: III
Date collected: 20/02/2013	Genotype/strain: unnamed
Date received by WRLFMD: 13/10/2014	Sequence filename: BOT13-01.SEQ
Date received for sequencing: 04/11/2014	Date sequence last updated: 05/11/2014
Species: Bovine	No. of Nt determined: 648
Material used: BTy1 23/10/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 648
RT-PCR primers: SAT2-1C445F/SAT-2B208R	Total no. of comparisons: 666
SAT2-P1-1223F/SAT-2B208R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 2 days
Comments:	

<b>Most Closely Related Viruses</b>									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT2/BOT/2/2013	BOT13-02	648	648	0	100.00	0.00	III	unnamed
2	SAT2/BOT/19/2012	BOT12-19	648	644	0	99.38	0.62	III	unnamed
3	SAT2/BOT/20/2012	BOT12-20	648	644	0	99.38	0.62	III	unnamed
4	SAT2/BOT/21/2012	BOT12-21	648	644	0	99.38	0.62	III	unnamed
5	SAT2/BOT/3/2012	BOT12-03	648	642	0	99.07	0.93	III	unnamed
6	SAT2/BOT/4/2012	BOT12-04	648	642	0	99.07	0.93	III	unnamed
7	SAT2/BOT/1/2012	BOT12-01	648	641	0	98.92	1.08	III	unnamed
8	SAT2/BOT/2/2012	BOT12-02	648	641	0	98.92	1.08	III	unnamed
9	SAT2/BOT/6/2012	BOT12A06	648	641	0	98.92	1.08	III	unnamed
10	SAT2/BOT/5/2012	BOT12-05	648	640	0	98.77	1.23	III	unnamed
<b>Most Closely Related Reference Viruses</b>									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	SAT2/BOT/P3/98 (buffalo 29) (AF367124)	BOT98-AC	647	562	1	86.86	13.14	III	unnamed
2	SAT2/RHO/1/48 (AY593847)	ZAM48B01	648	531	0	81.94	18.06	III	unnamed
3	SAT2/MAL/1/2003	MAL03-01	648	510	0	78.70	21.30	I	unnamed
4	SAT2/KEN/1/84 (K7/84) (AY344505)	KEN84-AB	648	509	0	78.55	21.45	IV	unnamed
5	SAT2/ETH/1/90 (1989)(AY343935)	ETH90-AA	648	508	0	78.40	21.60	IV	unnamed
6	SAT2/ZIM/14/2002 (KF219689)	ZIM02-14	648	508	0	78.40	21.60	I	unnamed
7	SAT2/SA/106/59 (AY593848)	RSA59--A	648	501	0	77.31	22.69	I	unnamed
8	SAT2/ZIM/7/83 (AF136607)	ZIM83A07	648	494	0	76.23	23.77	II	unnamed
9	SAT2/NIG/2/75 (AF367139)	NIG75-02	648	490	0	75.62	24.38	V	unnamed
10	SAT2/GHA/2/90 (AF479415)	GHA90A02	648	485	0	74.85	25.15	V	unnamed

nt, nucleotides

\*, not a WRLFMD reference number

Assembled with Report Generator v4.3

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# FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: SAT2	Report date: 06/11/2014
WRLFMD Ref No: BOT/2/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00031	Checked by: K. Bachanek-Bankowska
Sender Ref: BOT 2/13	
Location: Maun, North-West District, Botswana	Topotype: III
Date collected: 20/02/2013	Genotype/strain: unnamed
Date received by WRLFMD: 13/10/2014	Sequence filename: BOT13-02.SEQ
Date received for sequencing: 04/11/2014	Date sequence last updated: 05/11/2014
Species: Bovine	No. of Nt determined: 648
Material used: BTy1 23/10/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 648
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# Report on FMDV SAT 2 in Botswana in 2013

Batch: WRLFMD/2014/00031

◆ indicates viruses in this batch

Software: MEGA 6.06

Analysis

----- Phylogeny Reconstruction

----- All Selected Taxa

----- Neighbor-joining

Phylogeny Test

----- Bootstrap method

----- 1000

Substitution Model

----- Nucleotide

----- Kimura 2-parameter model

----- d: Transitions + Transversions

Rates and Patterns

----- Uniform rates

----- Same (Homogeneous)

Data Subset to Use

----- Pairwise deletion

----- 1st+2nd+3rd+Non-Coding

No. of Sites : 651

No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

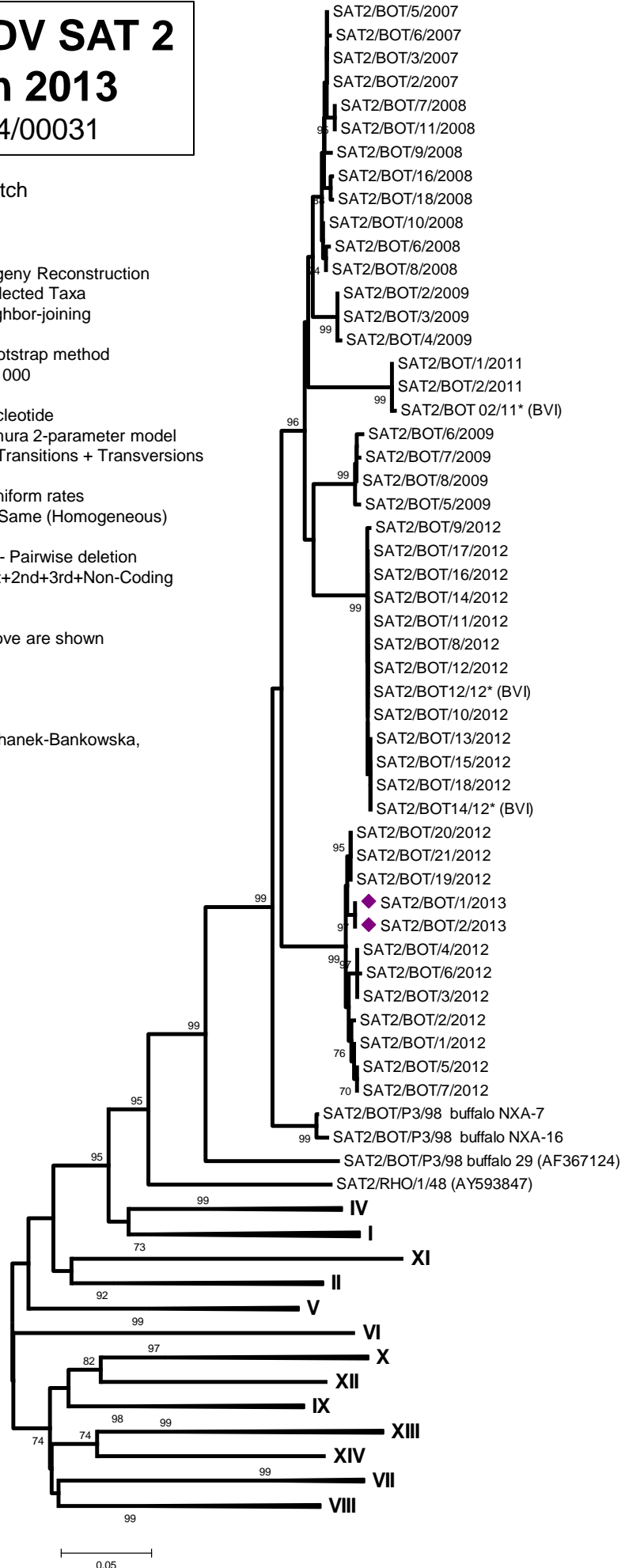
\*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Bachanek-Bankowska,

06 November 2014

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