

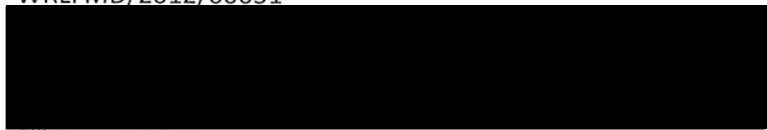


INSTITUTE FOR ANIMAL HEALTH
Director: Professor John Fazakerley BSc, MBA, PhD, FRCPath
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Ash Road,
Pirbright,
Surrey,
GU24 0NF
Intn Tel: 00 44 1483 232441
Tel: 01483 232441, Fax: 01483 232621

FMD Genotyping Report

Lab Reference WRL Batch Number: WRLFMD/2012/00031

Sender Details:



Date Received: 8th August 2012
Country of Origin: TANZANIA
Date Reported: 16th November 2012

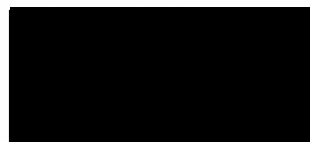
Dear Dr S. M. Das,

Sequencing work has now been completed in respect of the samples you submitted and the details are as attached. Please note that all of our phylogenetic trees can be accessed via the internet at: <http://www.wrlfmd.org/>

Results Approved By:

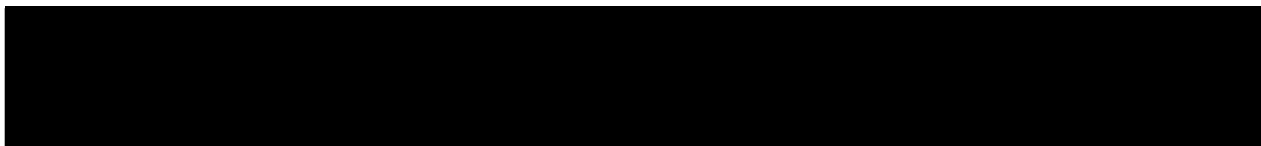


Official Stamp:



Date:

16 / 11 / 12



A UKAS accredited testing laboratory No. 4025.

To help us improve the quality of our service, please send any suggestions or requests to the Reference Laboratory by fax (+44 (0) 1483 232621 or email: trish.ryder@p.ac.uk. IAH actively seeks and appreciates feedback, if you would like to offer feedback please complete the WRLFMD survey here: <http://www.surveymonkey.com/s/WRLFMD>

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

Genotyping Report

Report Date for this Batch: 9 November 2012

FMDV type O

Country: Tanzania

Period: 2012

No. of samples: 2

BATCH: WRLFMD/2012/00031



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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O WRLFMD Ref No: TAN/38/2012 Batch No: WRLFMD/2012/00031 Sender Ref: 7306 Location: Maaloni, Ngorongoro district, Arusha region, Tanzania Date collected: 31/05/2012 Date received by WRLFMD: 08/08/2012 Date received for sequencing: 26/09/2012 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 09/11/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: EA-2 Genotype/strain: unnamed Sequence filename: TAN12-38.SEQ Date sequence last updated: 17/10/2012 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3406 Min. no. of nt for comparison: 600 Total turn-around time: 93 days Sequencing time: 44 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAN/39/2012	TAN12-39	639	639	0	100.00	0.00	EA-2	unnamed
2	O/KEN/137/2010	KEN10137	639	628	0	98.28	1.72	EA-2	Unnamed
3	O/KEN/151/2010	KEN10151	639	628	0	98.28	1.72	EA-2	Unnamed
4	O/KEN/16/2011	KEN11-16	639	628	0	98.28	1.72	EA-2	unnamed
5	O/KEN/15/2011	KEN11-15	639	626	0	97.97	2.03	EA-2	unnamed
6	O/TAN/2/2004	TAN04-02	639	618	0	96.71	3.29	EA-2	unnamed
7	O/TAN/3/2004	TAN04-03	639	618	0	96.71	3.29	EA-2	unnamed
8	O/TAN/12/2004	TAN04-12	639	616	0	96.40	3.60	EA-2	unnamed
9	O/KEN/10/2005	KEN05-10	639	613	0	95.93	4.07	EA-2	unnamed
10	O/KEN/27/2005	KEN05-27	639	611	0	95.62	4.38	EA-2	unnamed
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	O/TAN/2/2004	TAN04-02	639	618	0	96.71	3.29	EA-2	unnamed
2	O/UGA/3/2002 (DQ165077)	UGA02-03	639	582	0	91.08	8.92	EA-2	unnamed
3	O/KEN/5/2002 (DQ165073)	KEN02-05	639	580	0	90.77	9.23	EA-2	Unnamed
4	O/MAL/1/98 (DQ165074)	MAL98-01	639	573	0	89.67	10.33	EA-2	unnamed
5	O/K40/84*	KEN84-40	639	550	0	86.07	13.93	EA-1	unnamed
6	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
7	O/IRN/61/2001 (DQ164896)	IRN01-61	638	544	1	85.27	14.73	ME-SA	Irn-2001
8	O/UAE/4/2008	UAE08-04	636	540	0	84.91	15.09	ME-SA	Ind-2001c
9	O/KUW/3/97 (DQ164904)	KUW97-03	639	541	0	84.66	15.34	ME-SA	Ind-2001a
10	O/BHU/3/2009	BHU09-03	639	540	0	84.51	15.49	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O WRLFMD Ref No: TAN/39/2012 Batch No: WRLFMD/2012/00031 Sender Ref: 7307 Location: Maaloni, Ngorongoro district, Arusha region, Tanzania Date collected: 31/05/2012 Date received by WRLFMD: 08/08/2012 Date received for sequencing: 26/09/2012 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 09/11/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: EA-2 Genotype/strain: unnamed Sequence filename: TAN12-39.SEQ Date sequence last updated: 17/10/2012 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 3406 Min. no. of nt for comparison: 600 Total turn-around time: 93 days Sequencing time: 44 days
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9	O/KUW/3/97 (DQ164904)	KUW97-03	639	541	0	84.66	15.34	ME-SA	Ind-2001a
10	O/BHU/3/2009	BHU09-03	639	540	0	84.51	15.49	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

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Report on FMDV O in Tanzania in 2012

Batch: WRLFMD/2012/00031

◆ indicates viruses in this batch

Software: MEGA 5.1

Analysis

----- Phylogeny Reconstruction

Scope ----- All Selected Taxa

Statistical Method ----- Neighbor-joining

Phylogeny Test

Test of Phylogeny ----- Bootstrap method

No. of Bootstrap Replications ----- 1000

Substitution Model

Substitutions Type ----- Nucleotide

Model/Method ----- Kimura 2-parameter model

Substitutions to Include ----- d: Transitions + Transversions

Rates and Patterns

Rates among Sites ----- Uniform rates

Pattern among Lineages ----- Same (Homogeneous)

Data Subset to Use

Gaps/Missing Data Treatment ----- Pairwise deletion

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

No. of Sites : 642

No Of Bootstrap Reps = 1000

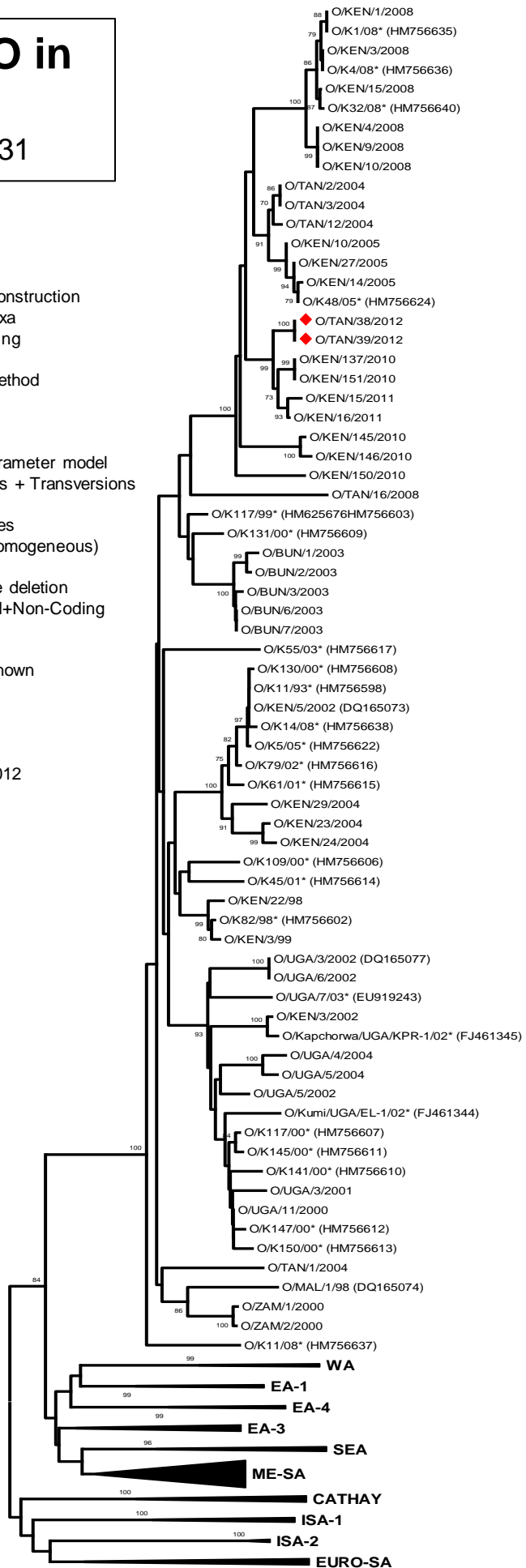
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 08 November 2012

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EA-2

0.02