

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

Genotyping Report

Report Date for this Batch: 18 April 2016

FMDV type O

Country: Ethiopia

Period: 2016

No. of samples: 1

BATCH: WRLFMD/2016/00010



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FAO World Reference Laboratory for FMD Genotyping Report

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

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Serotype: O	Report date: 12/04/2016
WRLFMD Ref No: ETH/1/2016	Reported by: N.J. Knowles
Batch No: WRLFMD/2016/00010	Checked by: K. Bachanek-Bankowska
Sender Ref: Eth-774/16	
Location: Bitu genet, Keffa, SNNPRS, Ethiopia	Topotype: EA-4
Date collected: 14/01/2016	Genotype/strain: unnamed
Date received by WRLFMD: 25/02/2016	Sequence filename: ETH16-01.SEQ
Date received for sequencing: 24/03/2016	Date sequence last updated: 12/04/2016
Species: Bovine	No. of Nt determined: 642
Material used: BTy2 22/03/2016	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 642
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4284
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 47 days
	Sequencing time: 19 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/ETH/12/2013	ETH13-12	642	627	0	97.66	2.34	EA-4	unnamed
2	O/ETH/13/2013	ETH13-13	642	627	0	97.66	2.34	EA-4	unnamed
3	O/ETH/14/2013	ETH13-14	642	627	0	97.66	2.34	EA-4	unnamed
4	O/ETH/15/2013	ETH13-15	642	627	0	97.66	2.34	EA-4	unnamed
5	O/ETH/4/2013	ETH13-04	642	626	0	97.51	2.49	EA-4	unnamed
6	O/ETH/8/2013	ETH13-08	642	621	0	96.73	3.27	EA-4	unnamed
7	O/ETH/9/2013	ETH13-09	642	621	0	96.73	3.27	EA-4	unnamed
8	O/KEN/100/2010 (KF135281)	KEN10100	642	605	0	94.24	5.76	EA-4	unnamed
9	O/UGA/9/98 (HM211072)	UGA98-09	642	571	0	88.94	11.06	EA-4	unnamed
10	O/U97/99* (HM756604)	UGA99-AA	642	569	0	88.63	11.37	EA-4	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/UGA/17/98 (HM211075)	UGA98-17	642	569	0	88.63	11.37	EA-4	unnamed
2	O/ETH/58/2005 (FJ798141)	ETH05-58	642	567	0	88.32	11.68	EA-4	unnamed
3	O/ETH/3/2004 (FJ798109)	ETH04-03	639	549	0	85.92	14.08	EA-3	unnamed
4	O/ETH/1/2007 (FJ798137)	ETH07-01	639	546	0	85.45	14.55	EA-3	unnamed
5	O/KEN/5/2002 (DQ165073)	KEN02-05	639	546	0	85.45	14.55	EA-2	unnamed
6	O/SUD/2/86 (DQ165075)	SUD86-02	639	546	0	85.45	14.55	EA-3	unnamed
7	O/UGA/3/2002 (DQ165077)	UGA02-03	639	543	0	84.98	15.02	EA-2	unnamed
8	O/K83/79* (AJ303511)	KEN79B83	638	542	1	84.95	15.05	EA-1	unnamed
9	O/TAI/189/87* (TRRL)	TAI87-AC	639	540	0	84.51	15.49	SEA	unnamed
10	O/UKG/35/2001 (AJ539141)	UKG01-35	639	539	0	84.35	15.65	ME-SA	PanAsia

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.4

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Report on FMDV O in Ethiopia in 2016

Batch: WRLFMD/2016/00010

◆ indicates viruses in this batch

Software: MEGA 6.06

Analysis

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.

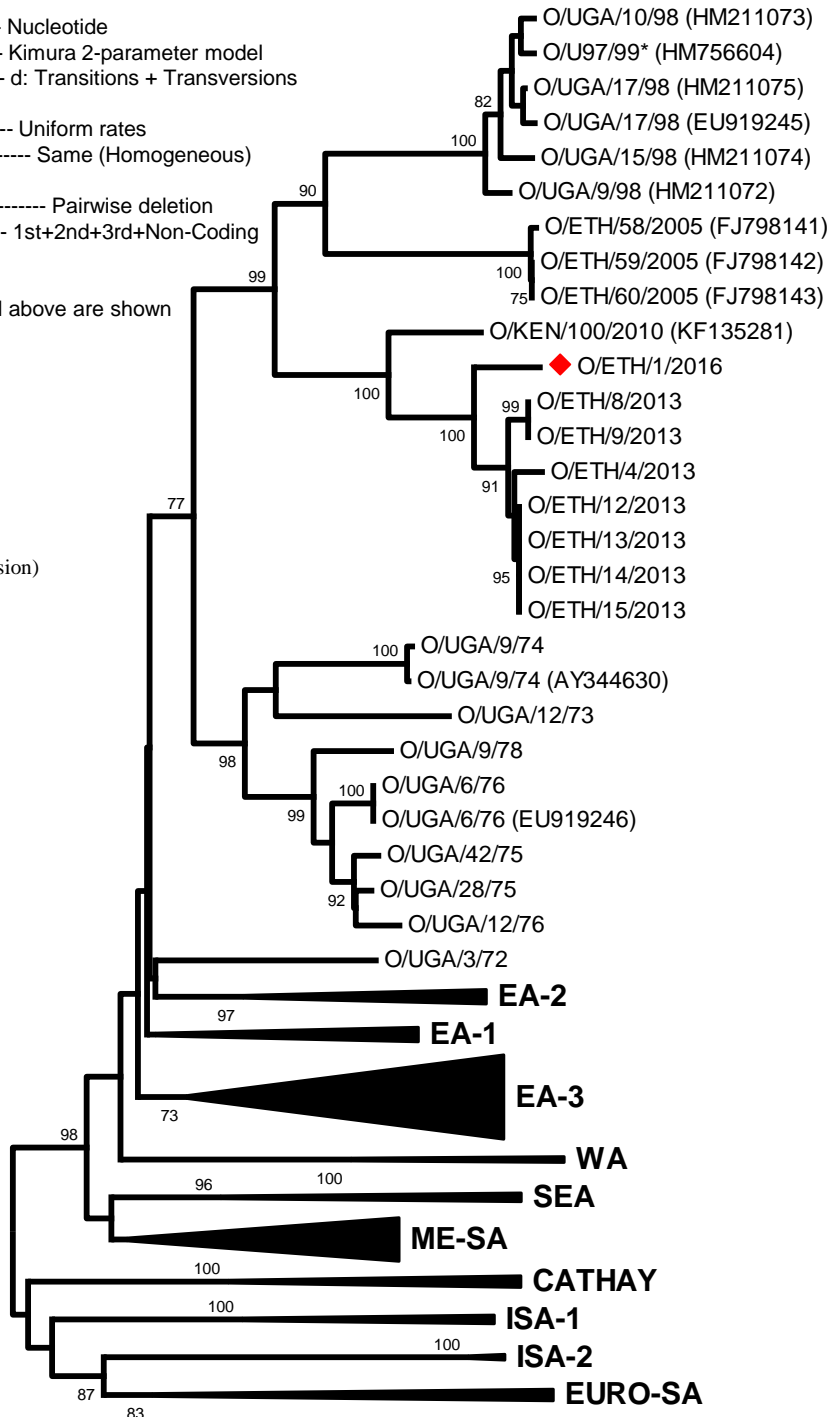
N.J. Knowles, J. Wadsworth &

K. Bachanek-Bankowska,

18 April 2016

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EA-4

0.02