

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

Genotyping Report

Report Date for this Batch: 17 December 2015

FMDV type O

Country: Cambodia

Period: 2015

No. of samples: 2

BATCH: WRLFMD/2015/00033



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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: 17/12/2015
WRLFMD Ref No: CAM/1/2015	Reported by: N.J. Knowles
Batch No: WRLFMD/2015/00033	Checked by: K. Bachanek-Bankowska
Sender Ref: CAM3/15R3B3	
Location: Bakan, Pursat, Cambodia	Topotype: ME-SA
Date collected: 14/09/2015	Genotype/strain: PanAsia
Date received by WRLFMD: 26/11/2015	Sequence filename: CAM15-01.SEQ
Date received for sequencing: 11/12/2015	Date sequence last updated: 15/12/2015
Species: Pig	No. of Nt determined: 639
Material used: RS1 05/12/2015	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4191
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 21 days
	Sequencing time: 6 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/CAM/3/2015	CAM15-03	639	639	0	100.00	0.00	ME-SA	PanAsia
2	O/CAM/1/2010	CAM10-01	639	612	0	95.77	4.23	ME-SA	PanAsia
3	O/CAM/3/2010	CAM10-03	639	612	0	95.77	4.23	ME-SA	PanAsia
4	O/CAM/6/2010	CAM10-06	639	612	0	95.77	4.23	ME-SA	PanAsia
5	O/VIT/20/2010	VIT10-20	639	612	0	95.77	4.23	ME-SA	PanAsia
6	O/VIT/21/2010	VIT10-21	639	612	0	95.77	4.23	ME-SA	PanAsia
7	O/VIT/23/2010	VIT10-23	639	612	0	95.77	4.23	ME-SA	PanAsia
8	O/VIT/23/2011	VIT11-23	639	612	0	95.77	4.23	ME-SA	PanAsia
9	O/VIT/7/2010	VIT10-07	639	612	0	95.77	4.23	ME-SA	PanAsia
10	O/VIT/8/2010	VIT10-08	639	612	0	95.77	4.23	ME-SA	PanAsia
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/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
2	O/KUW/3/97 (DQ164904)	KUW97-03	639	574	0	89.83	10.17	ME-SA	Ind-2001a
3	O/IRN/8/2005	IRN05-08	639	571	0	89.36	10.64	ME-SA	PanAsia-2
4	O/IRN/31/2009	IRN09-31	639	567	0	88.73	11.27	ME-SA	PanAsia-2 ^{FAR-09}
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	567	0	88.73	11.27	ME-SA	Ind-2001b
6	O/IRN/18/2010	IRN10-18	639	562	0	87.95	12.05	ME-SA	PanAsia-2 ^{BAL-09}
7	O/IRN/88/2009	IRN09-88	639	561	0	87.79	12.21	ME-SA	PanAsia-2 ^{ANT-10}
8	O/BHU/3/2009 (KM921814)	BHU09-03	639	560	0	87.64	12.36	ME-SA	Ind-2001d
9	O/PAK/16/2010	PAK10-16	639	560	0	87.64	12.36	ME-SA	PanAsia-2 ^{PUN-10}
10	O/TUR/257/2008* (FMDI)	TUR08-AD	639	558	0	87.32	12.68	ME-SA	PanAsia-2 ^{TER-08}

nt, nucleotides

*, not a WRLFMD reference number

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WRLFMD Ref No: CAM/3/2015	Reported by: N.J. Knowles
Batch No: WRLFMD/2015/00033	Checked by: K. Bachanek-Bankowska
Sender Ref: CAM8/15R3B3	
Location: Bakan, Pursat, Cambodia	Topotype: ME-SA
Date collected: 14/09/2015	Genotype/strain: PanAsia
Date received by WRLFMD: 26/11/2015	Sequence filename: CAM15-03.SEQ
Date received for sequencing: 11/12/2015	Date sequence last updated: 15/12/2015
Species: Pig	No. of Nt determined: 639
Material used: RS1 05/12/2015	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 4191
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Report on FMDV O in Cambodia in 2015

Batch: WRLFMD/2015/00033

◆ 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

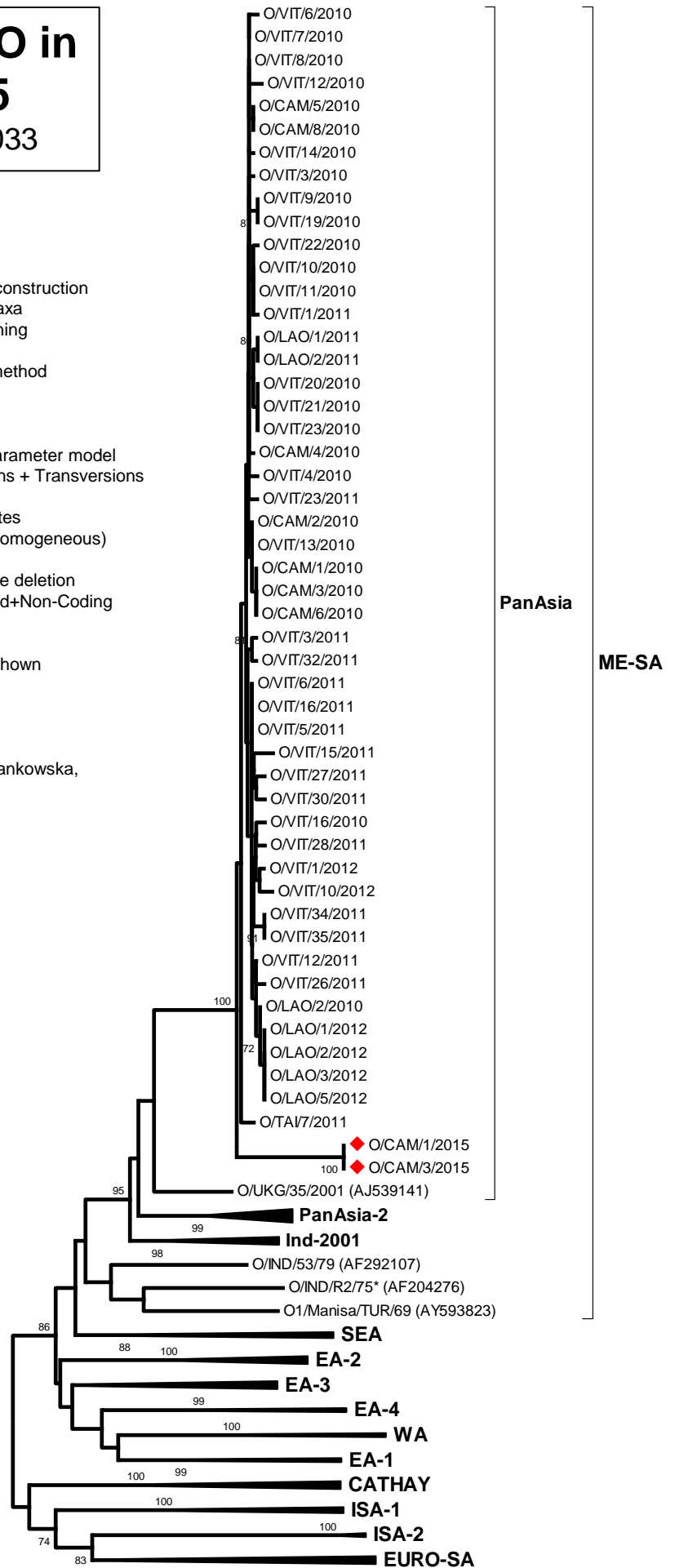
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Bachanek-Bankowska,
17 December 2015

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