

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

Genotyping Report

Report Date for this Batch: 8 June 2016

FMDV type A

Country: Saudi Arabia

Period: 2016

No. of samples: 1

BATCH: WRLFMD/2016/00015



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

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Serotype: A WRLFMD Ref No: SAU/15/2016 Batch No: WRLFMD/2016/00015 Sender Ref: 9939 Location: Al Kharj, Central Region, Saudi Arabia Date collected: 27/03/2016 Date received by WRLFMD: 17/05/2016 Date received for sequencing: 01/06/2016 Species: Cattle Material used: BTy1 21/05/2016 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 08/06/2016 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: G-VII Sequence filename: SAU16-15.SEQ Date sequence last updated: 07/06/2016 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2123 Min. no. of nt for comparison: 600 Total turn-around time: 22 days Sequencing time: 7 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/SAU/21/2015	SAU15-21	639	634	0	99.22	0.78	ASIA	G-VII
2	A/SAU/7/2015	SAU15-07	639	634	0	99.22	0.78	ASIA	G-VII
3	A/SAU/14/2015	SAU15-14	639	633	0	99.06	0.94	ASIA	G-VII
4	A/SAU/15/2015	SAU15-15	639	633	0	99.06	0.94	ASIA	G-VII
5	A/SAU/16/2015	SAU15-16	639	633	0	99.06	0.94	ASIA	G-VII
6	A/SAU/17/2015	SAU15-17	639	633	0	99.06	0.94	ASIA	G-VII
7	A/SAU/5/2015	SAU15-05	639	633	0	99.06	0.94	ASIA	G-VII
8	A/SAU/8/2015	SAU15-08	639	627	0	98.12	1.88	ASIA	G-VII
9	A/PD78/IND/2015* (PD-FMD)	IND15-AA	639	626	0	97.97	2.03	ASIA	G-VII
10	A/IRN/12/2015	IRN15-12	639	625	0	97.81	2.19	ASIA	G-VII
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	A/SAU/16/95 (EU553874)	SAU95-16	639	573	0	89.67	10.33	ASIA	G-VII
2	A/IND/40/2000* (1999;AF390646)	IND00-40	639	570	0	89.20	10.80	ASIA	G-VII
3	A22/IRQ/64 (AY593763)	IRQ64--A	639	536	0	83.88	16.12	ASIA	A ₂₂
4	A/IRN/1/96 (EF208771)	IRN96-01	638	531	1	83.23	16.77	ASIA	Iran-96
5	A/IRN/2/87 (EF208770)	IRN87-02	636	528	0	83.02	16.98	ASIA	Iran-87
6	A/IRN/22/99 (EF208772)	IRN99-22	636	523	0	82.23	17.77	ASIA	Iran-99
7	A12/UK/119/32 (M10975)	UKG32119	639	525	0	82.16	17.84	EURO-SA	A ₁₂
8	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	639	524	0	82.00	18.00	ASIA	A ₁₅
9	A/AFG/10/2010	AFG10-10	639	523	0	81.85	18.15	ASIA	Iran-05 ^{HER-10}
10	A/IRN/125/2010	IRN10125	639	521	0	81.53	18.47	ASIA	Iran-05 ^{SIS-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.5

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Report on FMDV A in Saudi Arabia in 2016

Batch: WRLFMD/2016/00015

◆ 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 : 639

No Of Bootstrap Reps = 1000

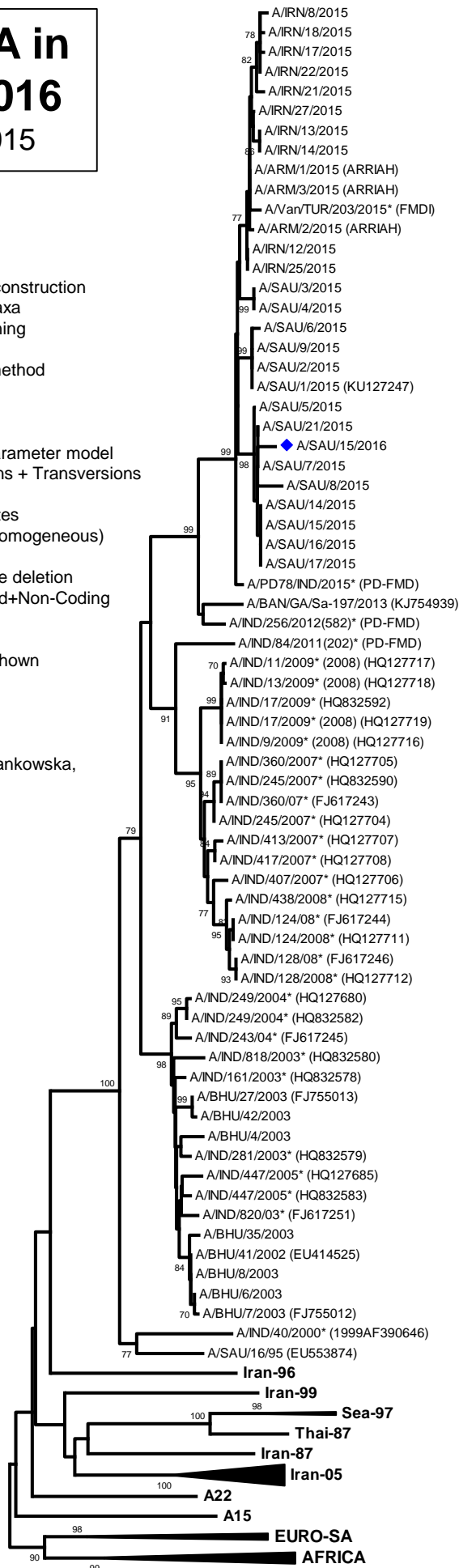
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Bachanek-Bankowska,
08 June 2016

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G-VII (aka G-18)

ASIA

0.02