



# Institute for Animal Health

Registered Office: Compton, Newbury, Berkshire RG20 7NN

Telephone: +44 (0) 1635-578411 Facsimile: +44 (0) 1635-577237

e-mail: [iah@bbsrc.ac.uk](mailto:iah@bbsrc.ac.uk) Website: <http://www.iah.bbsrc.ac.uk>

Director: Professor Martin Shirley PhD

Reply to Pirbright Laboratory  
Fax: 01483 232621  
Direct Dial: 01483 231014  
E-mail: [Elizabeth.byrom@bbsrc.ac.uk](mailto:Elizabeth.byrom@bbsrc.ac.uk)  
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**Email:** [REDACTED]  
**From:** [REDACTED]  
**Date:** 11<sup>th</sup> May 2009  
**Subject:** Sequencing Report  
**No. Of Pages:** 3

# FAX

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Thank you.

Dear [REDACTED]

## Virus isolates: A BAR/6/2009

Sequencing work has now been completed in respect of the above virus isolates received at IAH Pirbright on 1<sup>st</sup> of May 2009 and the details are as attached. Please note all of our phylogenetic trees can be accessed via the internet at:

[http://www.iah.bbsrc.ac.uk/primary\\_index/current\\_research/virus/Picornaviridae/Aphthovirus/index.html](http://www.iah.bbsrc.ac.uk/primary_index/current_research/virus/Picornaviridae/Aphthovirus/index.html)

Yours sincerely

[REDACTED]  
Head: World Reference Laboratory for FMD

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Pirbright Laboratory  
Ash Road, Pirbright, Woking  
Surrey GU24 0NF  
Tel: 01483-232441  
Fax: 01483-232448

Compton Laboratory  
Compton, Newbury,  
Berkshire RG20 7NN  
Tel: 01635-578411  
Fax: 01635-577237

# Molecular Epidemiology Report Form

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Serotype: A WRL Ref No: BAR/6/2009 Sender Ref: 0446 Date collected: 23/04/2009 Date received by WRLFMD: 01/05/2009 Date received for sequencing: 07/05/2009 Species: Cattle Material used: BTy2 Region sequenced: VPI RT-PCR primers: A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639	Report date: 09/05/2009 Reported by: N.J. Knowles Checked by: D.P. King  Topotype: ASIA Genotype/strain: Iran-05 <sup>BAR-08</sup> Sequence filename: BAR09-06.SEQ Date sequence last updated: 08/05/2009 Total no. of comparisons: 1122 Min. no. of nt for comparison: 300 Total turn-around time: 8 days Sequencing time: 2 days
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Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/2/2009	IRN09-02	639	637	0	99.69	0.31
2	A/IRN/21/2009	IRN09-21	639	637	0	99.69	0.31
3	A/IRN/22/2009	IRN09-22	639	637	0	99.69	0.31
4	A/IRN/29/2009	IRN09-29	639	637	0	99.69	0.31
5	A/IRQ/10/2009	IRQ09-10	639	637	0	99.69	0.31
6	A/IRQ/11/2009	IRQ09-11	639	637	0	99.69	0.31
7	A/IRQ/12/2009	IRQ09-12	639	637	0	99.69	0.31
8	A/IRQ/15/2009	IRQ09-15	639	637	0	99.69	0.31
9	A/IRQ/17/2009	IRQ09-17	639	637	0	99.69	0.31
10	A/IRQ/19/2009	IRQ09-19	639	637	0	99.69	0.31

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/1/2005 (EF208769)	IRN05-01	639	610	0	95.46	4.54
2	A/SAU/41/91	SAU91-41	636	539	0	84.75	15.25
3	A/TAI/118/87* (EF208777)	TAI87-AD	636	537	0	84.43	15.57
4	A/IRN/2/87 (EF208770)	IRN87-02	636	533	0	83.81	16.19
5	A/SAU/23/86 (EU414536)	SAU86-23	639	534	0	83.57	16.43
6	A/IRN/1/96 (EF208771)	IRN96-01	638	532	1	83.39	16.61
7	A/IRN/22/99 (EF208772)	IRN99-22	636	530	0	83.33	16.67
8	A/TAI/2/97 (EF208778)	TAI97-02	636	528	0	83.02	16.98
9	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	525	0	82.16	17.84
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55-C	639	514	0	80.44	19.56

nt, nucleotides

\*, not a WRLFMD reference number

# Report on FMDV A from Bahrain in 2009

Batch: WRLFMD/2009/00021

Software: MEGA 4.0

No. of Taxa : 252

Data File : n:\evd\megadb\fmdiva\BAR2009b.meg

Data Title : Bahrain 2009

Data Type : Nucleotide (Coding)

Analysis : Phylogeny reconstruction

Tree Inference : =====

->Method : Neighbor-Joining

->Phylogeny Test and options : Bootstrap (1000 replicates; seed=64238)

Include Sites : =====

->Gaps/Missing Data : Pairwise Deletion

->Codon Positions : 1st+2nd+3rd+Noncoding

Substitution Model : =====

->Model : Nucleotide: Kimura 2-parameter

->Substitutions to Include : d: Transitions + Transversions

->Pattern among Lineages : Same (Homogeneous)

->Rates among sites : Uniform rates

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 and J. Wadsworth, 9 May 2009

