

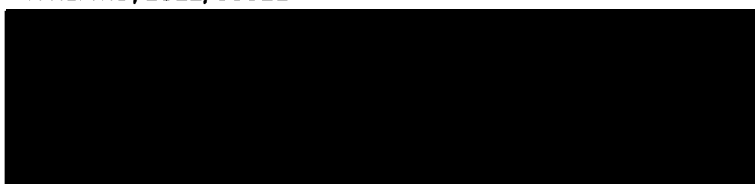


INSTITUTE FOR ANIMAL HEALTH
Director: Professor John Fazakerley BSc, MBA, PhD, FRCPath
PIRBRIGHT LABORATORY
Ash Road,
Pirbright,
Surrey,
GU24 0NF
Intn Tel: 00 44 1483 232441
Tel: 01483 232441 Fax: 01483 232621

FMD Genotyping Report

Lab Reference WRL Batch Number: WRLFMD/2012/00011

Sender Details:



Date Received: 12th March 2012

Country of Origin: Egypt

Date Reported: 10th April 2012

Dear Dr Soheir Hassan Abd El Kader

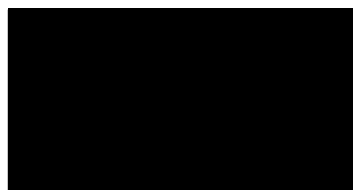
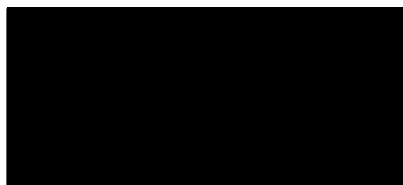
Sequencing work has now been completed in respect of the samples you submitted and the details are as attached. Please note that all of our phylogenetic trees can be accessed via the internet at:

<http://www.wrlfmd.org/>

Results Approved By:

Official Stamp:

Date:



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: gareth.shimmon@iah.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: 5 April 2012

FMDV type A

Country: Egypt

Period: 2010-2012

No. of samples: 8

BATCH: WRLFMD/2012/00011



The contents of this report are copyright and should not be reproduced without permission

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/1/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: C1349 S/N1	
Location: Giza-Talbia, Egypt	Topotype: ASIA
Date collected: 14/10/2010	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY10-01.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY/5/2011	EGY11-05	639	636	0	99.53	0.47	ASIA	Iran-05 ^{BAR-08}
2	A/EGY-8-2011*	EGY11-AF	635	628	4	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
3	A/EGY/3/2010	EGY10-03	639	627	0	98.12	1.88	ASIA	Iran-05 ^{BAR-08}
4	A/EGY-3-2011*	EGY11-AB	639	627	0	98.12	1.88	ASIA	Iran-05 ^{BAR-08}
5	A/EGY-2-2011*	EGY11-AA	636	624	3	98.11	1.89	ASIA	Iran-05 ^{BAR-08}
6	A/EGY/2/2010	EGY10-02	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
7	A/ISR/1/2009	ISR09-01	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
8	A/KUW/5/2009	KUW09-05	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/1/2009	LIB09-01	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/10/2009	LIB09-10	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	618	0	96.71	3.29	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	607	0	94.99	5.01	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	600	0	93.90	6.10	ASIA	Iran-05
4	A/IRN/78/2009	IRN09-78	639	599	0	93.74	6.26	ASIA	Iran-05 ^{FAR-09}
5	A/TUR/1/2008	TUR08-01	639	599	0	93.74	6.26	ASIA	Iran-05 ^{ARD-07}
6	A/AFG/10/2010	AFG10-10	639	597	0	93.43	6.57	ASIA	Iran-05 ^{HER-10}
7	A/TUR/33/2008	TUR08-33	639	591	0	92.49	7.51	ASIA	Iran-05 ^{EZM-07}
8	A/IRN/125/2010	IRN10125	639	590	0	92.33	7.67	ASIA	Iran-05 ^{SIS-10}
9	A/IRN/9/2011	IRN11-09	639	587	0	91.86	8.14	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	581	0	90.92	9.08	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/2/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: C/347 (1) S/N 2	
Location: Fayoum Al Lahoun, Egypt	Topotype: ASIA
Date collected: 15/10/2010	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY10-02.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY/3/2010	EGY10-03	639	638	0	99.84	0.16	ASIA	Iran-05 ^{BAR-08}
2	A/EGY-2-2011*	EGY11-AA	636	635	3	99.84	0.16	ASIA	Iran-05 ^{BAR-08}
3	A/EGY-3-2011*	EGY11-AB	639	638	0	99.84	0.16	ASIA	Iran-05 ^{BAR-08}
4	A/EGY/1/2010	EGY10-01	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
5	A/EGY/5/2011	EGY11-05	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
6	A/ISR/1/2009	ISR09-01	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
7	A/LIB/1/2009	LIB09-01	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
8	A/LIB/10/2009	LIB09-10	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/11/2009	LIB09-11	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/117/2009	LIB09117	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	619	0	96.87	3.13	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	607	0	94.99	5.01	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	600	0	93.90	6.10	ASIA	Iran-05 ^{FAR-09}
4	A/IRN/1/2005 (EF208769)	IRN05-01	639	599	0	93.74	6.26	ASIA	Iran-05
5	A/AFG/10/2010	AFG10-10	639	597	0	93.43	6.57	ASIA	Iran-05 ^{HER-10}
6	A/TUR/1/2008	TUR08-01	639	597	0	93.43	6.57	ASIA	Iran-05 ^{ARD-07}
7	A/IRN/125/2010	IRN10125	639	590	0	92.33	7.67	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/33/2008	TUR08-33	639	590	0	92.33	7.67	ASIA	Iran-05 ^{EZM-07}
9	A/IRN/9/2011	IRN11-09	639	583	0	91.24	8.76	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	578	0	90.45	9.55	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/3/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: C/347 (2) S/N 3	
Location: Fayoum Al Lahoun, Egypt	Topotype: ASIA
Date collected: 15/10/2010	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY10-03.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY-2-2011*	EGY11-AA	636	636	3	100.00	0.00	ASIA	Iran-05 ^{BAR-08}
2	A/EGY-3-2011*	EGY11-AB	639	639	0	100.00	0.00	ASIA	Iran-05 ^{BAR-08}
3	A/EGY/2/2010	EGY10-02	639	638	0	99.84	0.16	ASIA	Iran-05 ^{BAR-08}
4	A/EGY/1/2010	EGY10-01	639	627	0	98.12	1.88	ASIA	Iran-05 ^{BAR-08}
5	A/EGY/5/2011	EGY11-05	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
6	A/ISR/1/2009	ISR09-01	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
7	A/LIB/1/2009	LIB09-01	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
8	A/LIB/10/2009	LIB09-10	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/11/2009	LIB09-11	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/117/2009	LIB09117	639	624	0	97.65	2.35	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	618	0	96.71	3.29	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	606	0	94.84	5.16	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	599	0	93.74	6.26	ASIA	Iran-05 ^{FAR-09}
4	A/IRN/1/2005 (EF208769)	IRN05-01	639	598	0	93.58	6.42	ASIA	Iran-05
5	A/AFG/10/2010	AFG10-10	639	596	0	93.27	6.73	ASIA	Iran-05 ^{HER-10}
6	A/TUR/1/2008	TUR08-01	639	596	0	93.27	6.73	ASIA	Iran-05 ^{ARD-07}
7	A/IRN/125/2010	IRN10125	639	589	0	92.18	7.82	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/33/2008	TUR08-33	639	589	0	92.18	7.82	ASIA	Iran-05 ^{EZM-07}
9	A/IRN/9/2011	IRN11-09	639	582	0	91.08	8.92	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	577	0	90.30	9.70	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/2/2011	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: C/430 S/N 5	
Location: 6 Oct.Gov. Nahia, Egypt	Topotype: ASIA
Date collected: 09/01/2011	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY11-02.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY-5-2011*	EGY11-AD	639	639	0	100.00	0.00	ASIA	Iran-05 ^{BAR-08}
2	A/EGY/9/2011	EGY11-09	639	635	0	99.37	0.63	ASIA	Iran-05 ^{BAR-08}
3	A/EGY-12-2011*	EGY11-AI	639	635	0	99.37	0.63	ASIA	Iran-05 ^{BAR-08}
4	A/EGY-14-2011*	EGY11-AK	639	634	0	99.22	0.78	ASIA	Iran-05 ^{BAR-08}
5	A/ISR/1/2009	ISR09-01	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
6	A/KUW/5/2009	KUW09-05	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
7	A/LIB/1/2009	LIB09-01	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
8	A/LIB/10/2009	LIB09-10	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/11/2009	LIB09-11	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/117/2009	LIB09117	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	612	0	95.77	4.23	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	605	0	94.68	5.32	ASIA	Iran-05
4	A/IRN/78/2009	IRN09-78	639	603	0	94.37	5.63	ASIA	Iran-05 ^{FAR-09}
5	A/AFG/10/2010	AFG10-10	639	602	0	94.21	5.79	ASIA	Iran-05 ^{HER-10}
6	A/TUR/1/2008	TUR08-01	639	602	0	94.21	5.79	ASIA	Iran-05 ^{ARD-07}
7	A/TUR/33/2008	TUR08-33	639	596	0	93.27	6.73	ASIA	Iran-05 ^{EZM-07}
8	A/IRN/125/2010	IRN10125	639	595	0	93.11	6.89	ASIA	Iran-05 ^{SIS-10}
9	A/IRN/9/2011	IRN11-09	639	590	0	92.33	7.67	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	582	0	91.08	8.92	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/5/2011	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: A/881 S/N 8	
Location: Cairo-Ale4x-desert Road, Egypt	Topotype: ASIA
Date collected: 11/04/2011	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY11-05.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY/1/2010	EGY10-01	639	636	0	99.53	0.47	ASIA	Iran-05 ^{BAR-08}
2	A/EGY-8-2011*	EGY11-AF	635	631	4	99.37	0.63	ASIA	Iran-05 ^{BAR-08}
3	A/EGY/3/2010	EGY10-03	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
4	A/EGY-3-2011*	EGY11-AB	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
5	A/EGY-2-2011*	EGY11-AA	636	623	3	97.96	2.04	ASIA	Iran-05 ^{BAR-08}
6	A/EGY/2/2010	EGY10-02	639	625	0	97.81	2.19	ASIA	Iran-05 ^{BAR-08}
7	A/ISR/1/2009	ISR09-01	639	623	0	97.50	2.50	ASIA	Iran-05 ^{BAR-08}
8	A/KUW/5/2009	KUW09-05	639	623	0	97.50	2.50	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/1/2009	LIB09-01	639	623	0	97.50	2.50	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/10/2009	LIB09-10	639	623	0	97.50	2.50	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	617	0	96.56	3.44	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	606	0	94.84	5.16	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	599	0	93.74	6.26	ASIA	Iran-05
4	A/TUR/1/2008	TUR08-01	639	598	0	93.58	6.42	ASIA	Iran-05 ^{ARD-07}
5	A/IRN/78/2009	IRN09-78	639	597	0	93.43	6.57	ASIA	Iran-05 ^{FAR-09}
6	A/AFG/10/2010	AFG10-10	639	596	0	93.27	6.73	ASIA	Iran-05 ^{HER-10}
7	A/TUR/33/2008	TUR08-33	639	590	0	92.33	7.67	ASIA	Iran-05 ^{EZM-07}
8	A/IRN/125/2010	IRN10125	639	589	0	92.18	7.82	ASIA	Iran-05 ^{SIS-10}
9	A/IRN/9/2011	IRN11-09	639	586	0	91.71	8.29	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	580	0	90.77	9.23	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/8/2011	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: C/617 S/N 11	
Location: Beni Suif Ahnasia, Egypt	Topotype: ASIA
Date collected: 19/05/2011	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY11-08.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY/2/2011	EGY11-02	639	631	0	98.75	1.25	ASIA	Iran-05 ^{BAR-08}
2	A/EGY-5-2011*	EGY11-AD	639	631	0	98.75	1.25	ASIA	Iran-05 ^{BAR-08}
3	A/EGY/9/2011	EGY11-09	639	630	0	98.59	1.41	ASIA	Iran-05 ^{BAR-08}
4	A/EGY-12-2011*	EGY11-AI	639	630	0	98.59	1.41	ASIA	Iran-05 ^{BAR-08}
5	A/EGY-14-2011*	EGY11-AK	639	629	0	98.44	1.56	ASIA	Iran-05 ^{BAR-08}
6	A/ISR/1/2009	ISR09-01	639	629	0	98.44	1.56	ASIA	Iran-05 ^{BAR-08}
7	A/LIB/1/2009	LIB09-01	639	629	0	98.44	1.56	ASIA	Iran-05 ^{BAR-08}
8	A/LIB/10/2009	LIB09-10	639	629	0	98.44	1.56	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/11/2009	LIB09-11	639	629	0	98.44	1.56	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/117/2009	LIB09117	639	629	0	98.44	1.56	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	623	0	97.50	2.50	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	609	0	95.31	4.69	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	604	0	94.52	5.48	ASIA	Iran-05
4	A/IRN/78/2009	IRN09-78	639	602	0	94.21	5.79	ASIA	Iran-05 ^{FAR-09}
5	A/TUR/1/2008	TUR08-01	639	599	0	93.74	6.26	ASIA	Iran-05 ^{ARD-07}
6	A/AFG/10/2010	AFG10-10	639	598	0	93.58	6.42	ASIA	Iran-05 ^{HER-10}
7	A/TUR/33/2008	TUR08-33	639	593	0	92.80	7.20	ASIA	Iran-05 ^{EZM-07}
8	A/IRN/125/2010	IRN10125	639	592	0	92.64	7.36	ASIA	Iran-05 ^{SIS-10}
9	A/IRN/9/2011	IRN11-09	639	586	0	91.71	8.29	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	579	0	90.61	9.39	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/9/2011	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: C/673 S/N 12	
Location: Suze- Amer, Egypt	Topotype: ASIA
Date collected: 14/06/2011	Genotype/strain: Iran-05 ^{BAR-08}
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY11-09.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy2	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY-12-2011*	EGY11-AI	639	639	0	100.00	0.00	ASIA	Iran-05 ^{BAR-08}
2	A/EGY-14-2011*	EGY11-AK	639	638	0	99.84	0.16	ASIA	Iran-05 ^{BAR-08}
3	A/EGY/2/2011	EGY11-02	639	635	0	99.37	0.63	ASIA	Iran-05 ^{BAR-08}
4	A/EGY-5-2011*	EGY11-AD	639	635	0	99.37	0.63	ASIA	Iran-05 ^{BAR-08}
5	A/ISR/1/2009	ISR09-01	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
6	A/LIB/1/2009	LIB09-01	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
7	A/LIB/10/2009	LIB09-10	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
8	A/LIB/11/2009	LIB09-11	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
9	A/LIB/117/2009	LIB09117	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
10	A/LIB/13/2009	LIB09-13	639	632	0	98.90	1.10	ASIA	Iran-05 ^{BAR-08}
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/BAR/6/2008	BAR08-06	639	626	0	97.97	2.03	ASIA	Iran-05 ^{BAR-08}
2	A/AFG/6/2007	AFG07-06	639	612	0	95.77	4.23	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	604	0	94.52	5.48	ASIA	Iran-05
4	A/IRN/78/2009	IRN09-78	639	604	0	94.52	5.48	ASIA	Iran-05 ^{FAR-09}
5	A/TUR/1/2008	TUR08-01	639	602	0	94.21	5.79	ASIA	Iran-05 ^{ARD-07}
6	A/AFG/10/2010	AFG10-10	639	600	0	93.90	6.10	ASIA	Iran-05 ^{HER-10}
7	A/IRN/125/2010	IRN10125	639	595	0	93.11	6.89	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/33/2008	TUR08-33	639	595	0	93.11	6.89	ASIA	Iran-05 ^{EZM-07}
9	A/IRN/9/2011	IRN11-09	639	588	0	92.02	7.98	ASIA	Iran-05 ^{QAZ-11}
10	A/IRN/9/2010	IRN10-09	639	581	0	90.92	9.08	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 05/04/2012
WRLFMD Ref No: EGY/1/2012	Reported by: N.J. Knowles
Batch No: WRLFMD/2012/00011	Checked by: D.P. King
Sender Ref: R/171 Sample 1 Outbreak 1	
Location: Ismaielya-Salhya 2, Egypt	Topotype: AFRICA
Date collected: 08/02/2012	Genotype/strain: G-IV
Date received by WRLFMD: 12/03/2012	Sequence filename: EGY12-01.SEQ
Date received for sequencing: 04/04/2012	Date sequence last updated: 05/04/2012
Species: Not Known	No. of Nt determined: 639
Material used: BTy3	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1402
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 24 days
	Sequencing time: 1 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/EGY-B-2012*	EGY12-AB	639	639	0	100	0	AFRICA	G-IV
2	A/ERI/1/2006	ERI06-01	639	598	0	93.58	6.42	AFRICA	G-IV
3	A/SUD/3/2006 (GU566070)	SUD06-03	639	598	0	93.58	6.42	AFRICA	G-IV
4	A/ERI/1/2008	ERI08-01	639	597	0	93.43	6.57	AFRICA	G-IV
5	A/ERI/16/2009	ERI09-16	639	597	0	93.43	6.57	AFRICA	G-IV
6	A/ERI/4/2007	ERI07-04	639	597	0	93.43	6.57	AFRICA	G-IV
7	A/ERI/5/2008	ERI08-05	639	597	0	93.43	6.57	AFRICA	G-IV
8	A/ERI/5/2006	ERI06-05	639	596	0	93.27	6.73	AFRICA	G-IV
9	A/SUD/1/2006 (GU566069)	SUD06-01	639	596	0	93.27	6.73	AFRICA	G-IV
10	A/ERI/40/2009	ERI09-40	639	589	0	92.18	7.82	AFRICA	G-IV
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/SUD/3/77 (GU566064)	SUD77-03	639	543	0	84.98	15.02	AFRICA	G-IV
2	A/GHA/16/73	GHA73-16	636	530	0	83.33	16.67	AFRICA	G-VI
3	A/KEN/42/66 (K18/66)	KEN66-42	639	526	0	82.32	17.68	AFRICA	G-I
4	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	639	526	0	82.32	17.68	AFRICA	G-III
5	A/NGR/2/73	NGR73-02	639	525	0	82.16	17.84	AFRICA	G-V
6	A/UGA/13/66	UGA66-13	639	523	0	81.85	18.15	AFRICA	G-VII
7	A12/UK/119/32 (M10975)	UKG32119	639	512	0	80.13	19.87	EURO-SA	A ₁₂
8	A23/Kitale/KEN/64 (AY593766)	KEN64-AB	639	512	0	80.13	19.87	AFRICA	G-VIII
9	A/EGY/1/72 (EF208756)	EGY72-01	639	510	0	79.81	20.19	AFRICA	G-II
10	A5/Allier/FRA/60 (AY593780)	FRA60--F	636	506	0	79.56	20.44	EURO-SA	A ₅

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© Institute for Animal Health (not to be reproduced without permission)

Report on FMDV A in Egypt in 2010-2011

Batch: WRLFMD/2012/00011

◆ indicates viruses in this batch

Software: MEGA 5.0

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 : 639

No Of Bootstrap Reps = 1000

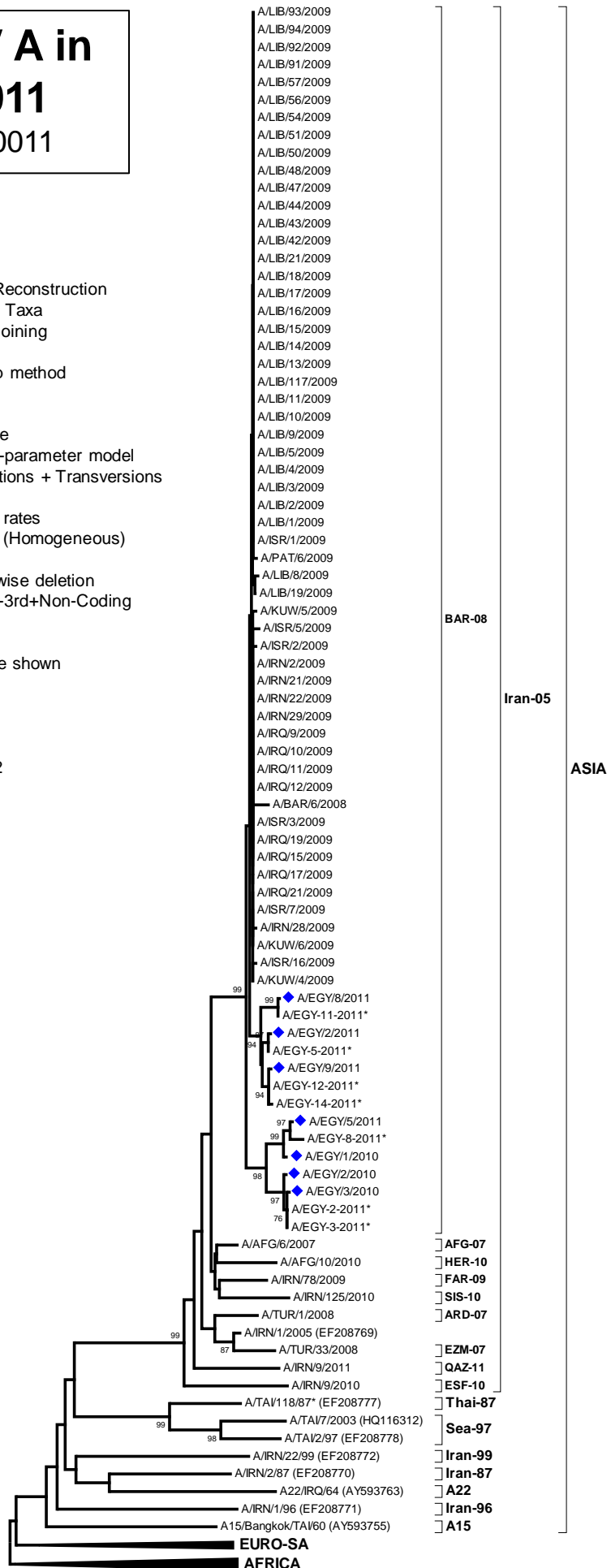
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 05 April 2012

© Institute for Animal Health

(not to be reproduced without permission)



BAR-08

Iran-05

ASIA

- AFG-07
- HER-10
- FAR-09
- SIS-10
- ARD-07
- EZM-07
- QAZ-11
- ESF-10
- Thai-87
- Sea-97
- Iran-99
- Iran-87
- A22
- Iran-96
- A15

0.02

Report on FMDV A in Egypt in 2012

Batch: WRLFMD/2012/00011

◆ indicates viruses in this batch

Software: MEGA 5.0

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 : 639

No Of Bootstrap Reps = 1000

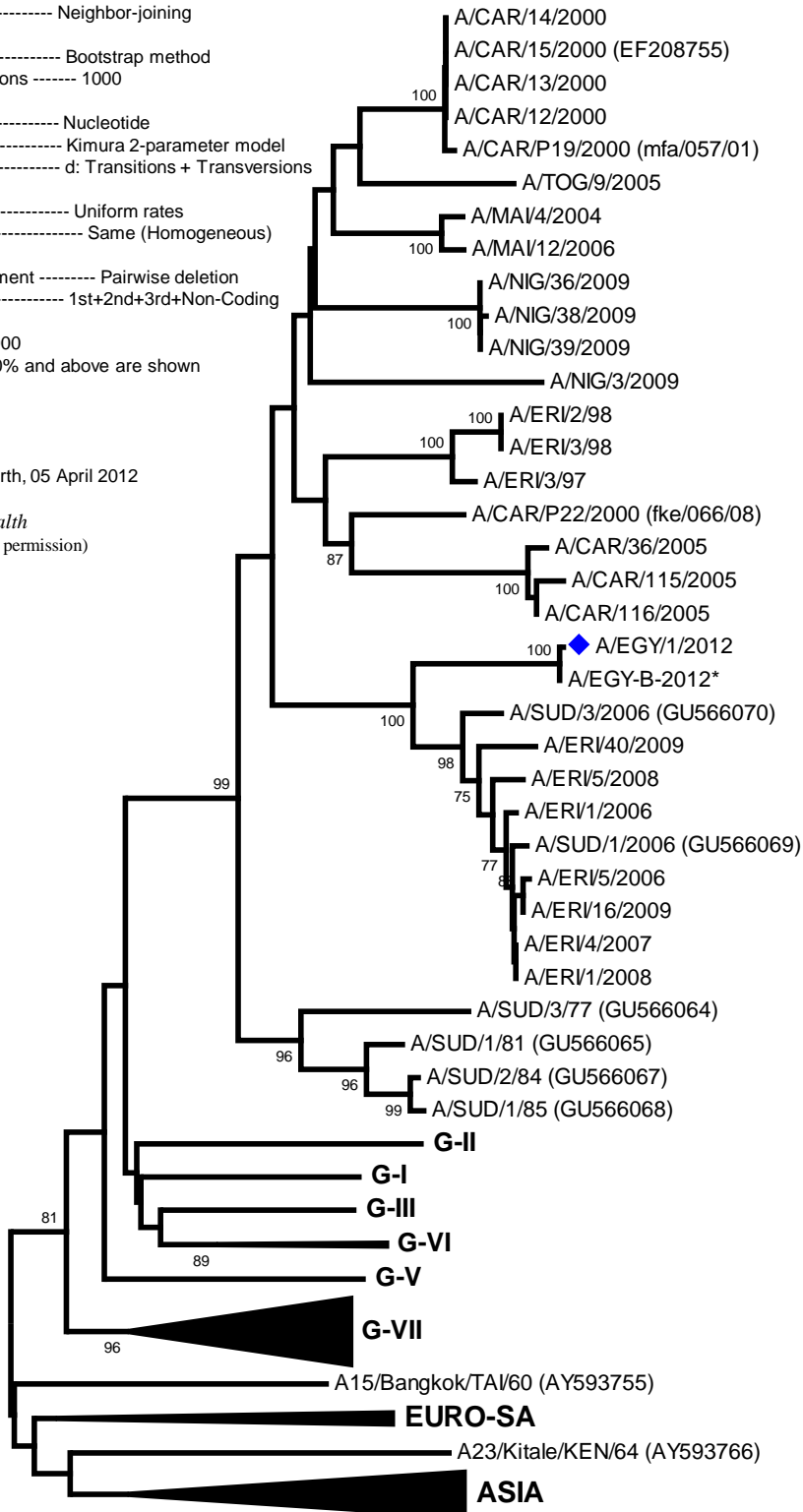
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 05 April 2012

© Institute for Animal Health

(not to be reproduced without permission)



G-IV

AFRICA

0.02