



INSTITUTE FOR ANIMAL HEALTH
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FMD Sequencing Report

Lab Reference WRL Batch Number: WRLFMD/2011/00019

Sender Details:

Date Received: 6th April 2011
Country of Origin: Iraq
Date Reported: 24th May 2011

Dear Dr. Basem Adhadh,

Re.: Serotype O

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:

24/05/2011

Testing carried out by WRLFMD is UKAS ISO/IEC 17025 accredited. Please see link for scope of accreditation:

http://www.ukas.org/testing/lab_detail.asp?lab_id=2811&location_id=&vMenuOption=3 . 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: elizabeth.wilson@bbsrc.ac.uk)

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

Genotyping Report

Report Date for this Batch: 20 May 2011

FMDV type O

Country: Iraq

Period: 2010

No. of samples: 6

BATCH: WRLFMD/2011/00019



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FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: O	Report date: 20/05/2011
WRLFMD Ref No: IRQ/4/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2011/00019	Checked by: D.P. King
Sender Ref: 5	
Location: Majaf, Iraq	Topotype: ME-SA
Date collected: 12/09/2010	Genotype/strain: PanAsia-2 ^{ANT-10}
Date received by WRLFMD: 06/04/2011	Sequence filename: IRQ10-04.SEQ
Date received for sequencing: 18/04/2011	Date sequence last updated: 21/04/2011
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2864
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 44 days
	Sequencing time: 32 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/IRQ/6/2010	IRQ10-06	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRQ/7/2010	IRQ10-07	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/100/2010	IRN10100	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/101/2010	IRN10101	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/142/2010	IRN10142	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/20/2010	IRN10-20	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/33/2010	IRN10-33	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/34/2010	IRN10-34	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/37/2010	IRN10-37	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/38/2010	IRN10-38	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
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/IRN/88/2009	IRN09-88	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/8/2005	IRN05-08	639	601	0	94.05	5.95	ME-SA	PanAsia-2
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	601	0	94.05	5.95	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/31/2009	IRN09-31	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{FAR-09}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{SAN-09}
6	O/IRN/18/2010	IRN10-18	639	592	0	92.64	7.36	ME-SA	PanAsia-2 ^{BAL-09}
7	O/PAK/16/2010	PAK10-16	639	589	0	92.18	7.82	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	580	0	90.77	9.23	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	577	0	90.30	9.70	ME-SA	Pak-98
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: IRQ/6/2010 Batch No: WRLFMD/2011/00019 Sender Ref: 9 Location: Babylon, Iraq Date collected: 12/09/2010 Date received by WRLFMD: 06/04/2011 Date received for sequencing: 18/04/2011 Species: Sheep Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 20/05/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: IRQ10-06.SEQ Date sequence last updated: 21/04/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2864 Min. no. of nt for comparison: 600 Total turn-around time: 44 days Sequencing time: 32 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/IRQ/4/2010	IRQ10-04	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRQ/7/2010	IRQ10-07	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/20/2010	IRN10-20	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/33/2010	IRN10-33	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/34/2010	IRN10-34	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/37/2010	IRN10-37	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/38/2010	IRN10-38	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
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/IRN/88/2009	IRN09-88	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	603	0	94.37	5.63	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/31/2009	IRN09-31	639	601	0	94.05	5.95	ME-SA	PanAsia-2 ^{FAR-09}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{SAN-09}
6	O/IRN/18/2010	IRN10-18	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{BAL-09}
7	O/PAK/16/2010	PAK10-16	639	591	0	92.49	7.51	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	575	0	89.98	10.02	ME-SA	Pak-98
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 20/05/2011
WRLFMD Ref No: IRQ/7/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2011/00019	Checked by: D.P. King
Sender Ref: 7	
Location: Babylon, Iraq	Topotype: ME-SA
Date collected: 11/10/2010	Genotype/strain: PanAsia-2 ^{ANT-10}
Date received by WRLFMD: 06/04/2011	Sequence filename: IRQ10-07.SEQ
Date received for sequencing: 18/04/2011	Date sequence last updated: 21/04/2011
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2864
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 44 days
	Sequencing time: 32 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/IRQ/6/2010	IRQ10-06	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRQ/8/2010	IRQ10-08	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRQ/4/2010	IRQ10-04	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/100/2010	IRN10100	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/101/2010	IRN10101	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/142/2010	IRN10142	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/20/2010	IRN10-20	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/33/2010	IRN10-33	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/34/2010	IRN10-34	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/37/2010	IRN10-37	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
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/IRN/88/2009	IRN09-88	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/8/2005	IRN05-08	639	601	0	94.05	5.95	ME-SA	PanAsia-2
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	601	0	94.05	5.95	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/31/2009	IRN09-31	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{FAR-09}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{SAN-09}
6	O/IRN/18/2010	IRN10-18	639	592	0	92.64	7.36	ME-SA	PanAsia-2 ^{BAL-09}
7	O/PAK/16/2010	PAK10-16	639	589	0	92.18	7.82	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	580	0	90.77	9.23	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	573	0	89.67	10.33	ME-SA	Pak-98
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 20/05/2011
WRLFMD Ref No: IRQ/8/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2011/00019	Checked by: D.P. King
Sender Ref: 8	
Location: Babylon, Iraq	Topotype: ME-SA
Date collected: 11/10/2010	Genotype/strain: PanAsia-2 ^{ANT-10}
Date received by WRLFMD: 06/04/2011	Sequence filename: IRQ10-08.SEQ
Date received for sequencing: 18/04/2011	Date sequence last updated: 21/04/2011
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2864
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 44 days
	Sequencing time: 32 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/IRQ/7/2010	IRQ10-07	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRQ/6/2010	IRQ10-06	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRQ/4/2010	IRQ10-04	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/100/2010	IRN10100	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/101/2010	IRN10101	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/142/2010	IRN10142	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/20/2010	IRN10-20	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/33/2010	IRN10-33	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/34/2010	IRN10-34	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/37/2010	IRN10-37	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
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/IRN/88/2009	IRN09-88	639	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/8/2005	IRN05-08	639	599	0	93.74	6.26	ME-SA	PanAsia-2
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/31/2009	IRN09-31	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{FAR-09}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	592	0	92.64	7.36	ME-SA	PanAsia-2 ^{SAN-09}
6	O/IRN/18/2010	IRN10-18	639	590	0	92.33	7.67	ME-SA	PanAsia-2 ^{BAL-09}
7	O/PAK/16/2010	PAK10-16	639	587	0	91.86	8.14	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	578	0	90.45	9.55	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	573	0	89.67	10.33	ME-SA	Pak-98
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 20/05/2011
WRLFMD Ref No: IRQ/12/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2011/00019	Checked by: D.P. King
Sender Ref: 2	
Location: Anbar, Iraq	Topotype: ME-SA
Date collected: 14/11/2010	Genotype/strain: PanAsia-2 ^{ANT-10}
Date received by WRLFMD: 06/04/2011	Sequence filename: IRQ10-12.SEQ
Date received for sequencing: 18/04/2011	Date sequence last updated: 21/04/2011
Species: Sheep	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2864
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 44 days
	Sequencing time: 32 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/IRQ/13/2010	IRQ10-13	639	639	0	100.00	0.00	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/15/2010	IRN10-15	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/AFG/217/2010	AFG10217	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
4	O/AFG/219/2010	AFG10219	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
5	O/AFG/221/2010	AFG10221	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/100/2010	IRN10100	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/101/2010	IRN10101	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/142/2010	IRN10142	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/20/2010	IRN10-20	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/33/2010	IRN10-33	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
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/IRN/88/2009	IRN09-88	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
3	O/IRN/31/2009	IRN09-31	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{FAR-09}
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/18/2010	IRN10-18	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{BAL-09}
6	O/TUR/264/2009* (FMDI)	TUR09-AK	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{SAN-09}
7	O/PAK/16/2010	PAK10-16	639	592	0	92.64	7.36	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
9	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
10	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O	Report date: 20/05/2011
WRLFMD Ref No: IRQ/13/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2011/00019	Checked by: D.P. King
Sender Ref: 4	
Location: Anbar, Iraq	Topotype: ME-SA
Date collected: 14/11/2010	Genotype/strain: PanAsia-2 ^{ANT-10}
Date received by WRLFMD: 06/04/2011	Sequence filename: IRQ10-13.SEQ
Date received for sequencing: 18/04/2011	Date sequence last updated: 21/04/2011
Species: Sheep	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2864
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 44 days
	Sequencing time: 32 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/IRQ/12/2010	IRQ10-12	639	639	0	100.00	0.00	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/15/2010	IRN10-15	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/AFG/217/2010	AFG10217	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
4	O/AFG/219/2010	AFG10219	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
5	O/AFG/221/2010	AFG10221	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/100/2010	IRN10100	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/101/2010	IRN10101	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/142/2010	IRN10142	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/20/2010	IRN10-20	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/33/2010	IRN10-33	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
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/IRN/88/2009	IRN09-88	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
3	O/IRN/31/2009	IRN09-31	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{FAR-09}
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/18/2010	IRN10-18	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{BAL-09}
6	O/TUR/264/2009* (FMDI)	TUR09-AK	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{SAN-09}
7	O/PAK/16/2010	PAK10-16	639	592	0	92.64	7.36	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
9	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
10	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

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Report on FMDV O in Iraq in 2010

Batch: WRLFMD/2011/00019

◆ 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

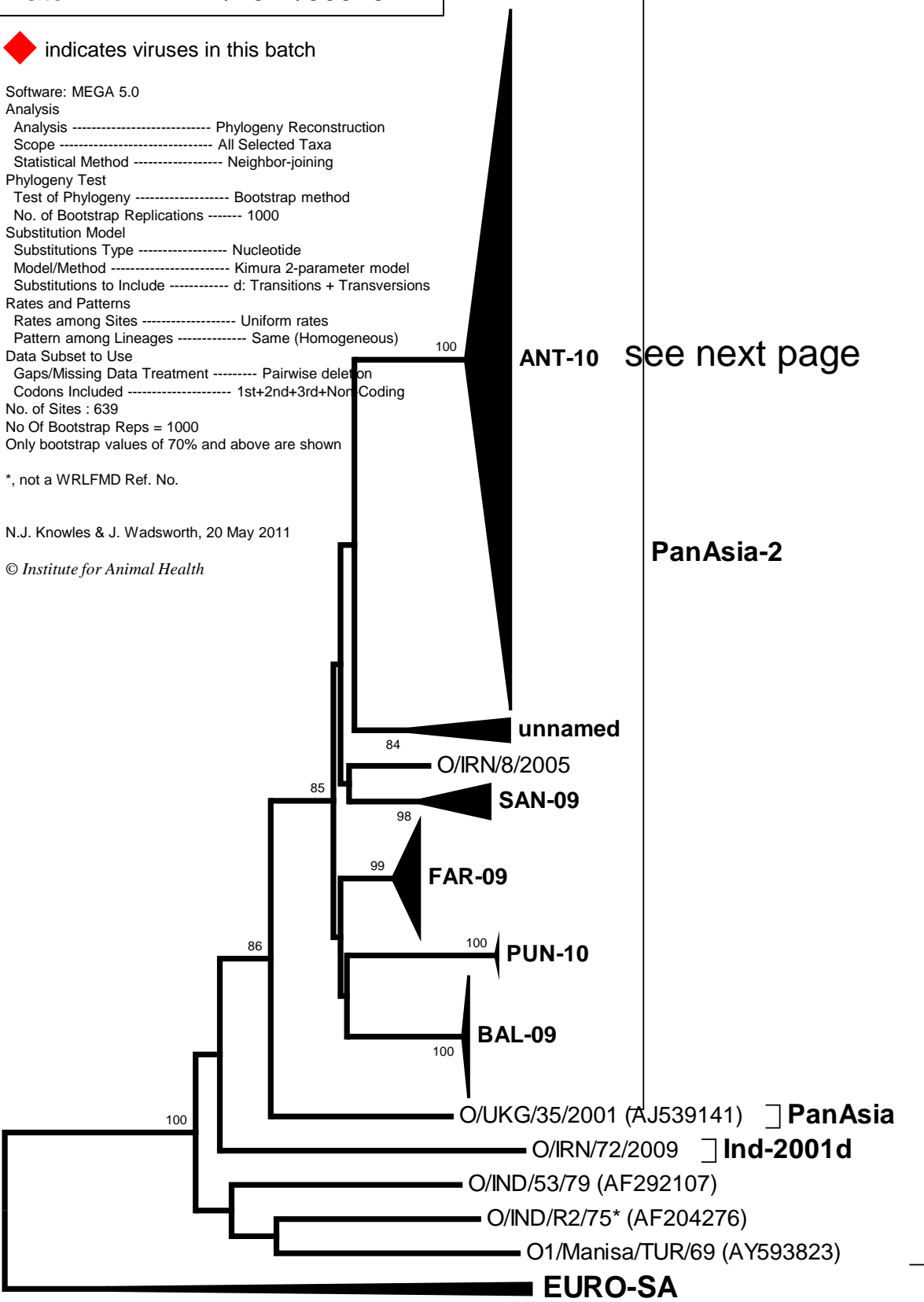
No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 20 May 2011

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ANT-10 see next page

PanAsia-2

ME-SA

unnamed

SAN-09

FAR-09

PUN-10

BAL-09

PanAsia

Ind-2001d

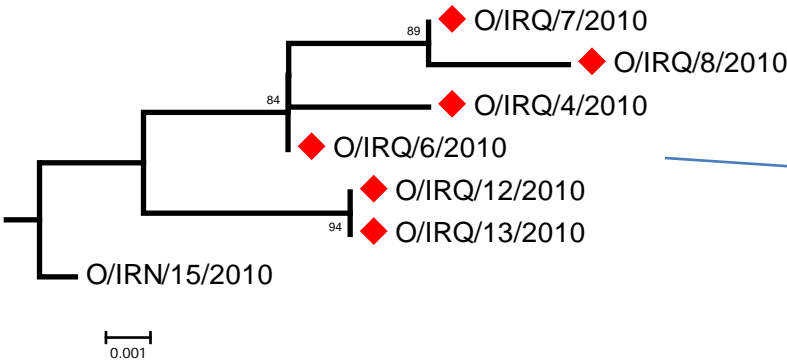
EURO-SA

0.02

Report on FMDV O in Iraq in 2010

Batch: WRLFMD/2011/00019

◆ indicates viruses in this batch



O/ME-SA/PanAsia-2ANT-10