



INSTITUTE FOR ANIMAL HEALTH

Acting Director: Professor David Paton MA, VetMB, PhD, MRCVS

PIRBRIGHT LABORATORY

Ash Road,

Pirbright,

Surrey,

GU24 0NF

Intn Tel: 00 44 1483 232441

Tel: 01483 232441 Fax: 01483 232621

FMD Sequencing Report

Lab Reference WRL Batch Number: WRLFMD/2011/00013

Sender Details:

[REDACTED]

Date Received: 25th February 2011

Country of Origin: Turkey

Date Reported: 28th March 2011

Dear Dr. Musa Alkan,

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:

[REDACTED]

Official Stamp:

[REDACTED]

Date:

[REDACTED]

[REDACTED]

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: 23 March 2011

FMDV type O

Country: Turkey

Period: 2010-2011

No. of samples: 7

BATCH: WRLFMD/2011/00013



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FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: O WRLFMD Ref No: TUR/42/2010 Batch No: WRLFMD/2011/00013 Sender Ref: 18/2011 Location: Avdancik, Osmangazi, Bursa, Marmara, Turkey Date collected: 25/12/2010 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 01/03/2011 Species: Sheep Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-42.SEQ Date sequence last updated: 03/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 22 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/TUR/4/2011	TUR11-04	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/22/2010	TUR10-22	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/92/2010	IRN10-92	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/94/2010	IRN10-94	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/95/2010	IRN10-95	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/1003/2010* (FMDI)	TUR10-BG	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/1086/2010* (FMDI)	TUR10-BI	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/18/2010	TUR10-18	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	627	0	98.12	1.88	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	600	0	93.90	6.10	ME-SA	PanAsia-2 ^{FAR-09}
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	598	0	93.58	6.42	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/PAK/16/2010	PAK10-16	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{PUN-10}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	593	0	92.80	7.20	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
9	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
10	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/1/2011 Batch No: WRLFMD/2011/00013 Sender Ref: 58/2011 Location: Dokuzkat, Kerkez, Kastamonij, Black Sea, Turkey Date collected: 01/01/2011 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 04/03/2011 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR11-01.SEQ Date sequence last updated: 08/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 19 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/TUR/32/2010	TUR10-32	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/12/2011	TUR11-12	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/TUR/39/2010	TUR10-39	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/66/2010	IRN10-66	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/1003/2010* (FMDI)	TUR10-BG	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	628	0	98.28	1.72	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	603	0	94.37	5.63	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	601	0	94.05	5.95	ME-SA	PanAsia-2
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	601	0	94.05	5.95	ME-SA	PanAsia-2 ^{TER-08}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{SAN-09}
6	O/PAK/16/2010	PAK10-16	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{PUN-10}
7	O/IRN/18/2010	IRN10-18	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{BAL-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/4/2011 Batch No: WRLFMD/2011/00013 Sender Ref: 89/2011 Location: Teketaban, Karapurcek, Sakarya, Marmara, Turkey Date collected: 05/01/2011 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 04/03/2011 Species: Cattle Material used: BTy2 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR11-04.SEQ Date sequence last updated: 08/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 19 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/TUR/42/2010	TUR10-42	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/92/2010	IRN10-92	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/94/2010	IRN10-94	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/95/2010	IRN10-95	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/1003/2010* (FMDI)	TUR10-BG	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/1086/2010* (FMDI)	TUR10-BI	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/18/2010	TUR10-18	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/840/2010* (FMDI)	TUR10-AZ	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	627	0	98.12	1.88	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	600	0	93.90	6.10	ME-SA	PanAsia-2 ^{FAR-09}
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	598	0	93.58	6.42	ME-SA	PanAsia-2 ^{TER-08}
5	O/PAK/16/2010	PAK10-16	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{PUN-10}
6	O/IRN/18/2010	IRN10-18	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{BAL-09}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	593	0	92.80	7.20	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
9	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
10	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/8/2011 Batch No: WRLFMD/2011/00013 Sender Ref: 313/2011 Location: Kirca, Sultandagi, Afyonkarahisar, Aegean, Turkey Date collected: 14/01/2011 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 04/03/2011 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR11-08.SEQ Date sequence last updated: 08/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 19 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/TUR/1003/2010* (FMDI)	TUR10-BG	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/1086/2010* (FMDI)	TUR10-BI	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/18/2010	TUR10-18	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/840/2010* (FMDI)	TUR10-AZ	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/TUR/868/2010* (FMDI)	TUR10-BA	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/TUR/883/2010* (FMDI)	TUR10-BB	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/926/2010* (FMDI)	TUR10-BE	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/BUL/1/2010	BUL10-01	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/1094/2010* (FMDI)	TUR10-BK	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/1410/2010* (FMDI)	TUR10-BN	638	633	1	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	626	0	97.97	2.03	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/IRN/31/2009	IRN09-31	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{FAR-09}
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/18/2010	IRN10-18	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{BAL-09}
6	O/PAK/16/2010	PAK10-16	639	593	0	92.80	7.20	ME-SA	PanAsia-2 ^{PUN-10}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	592	0	92.64	7.36	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	566	1	88.71	11.29	ME-SA	Iran-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/9/2011 Batch No: WRLFMD/2011/00013 Sender Ref: 178/2011 Location: Calkaya, Merkez, Kilis, South East Anatolia, Turkey Date collected: 15/01/2011 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 04/03/2011 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR11-09.SEQ Date sequence last updated: 08/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 19 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/TUR/153/2010* (FMDI)	TUR10-AR	639	626	0	97.97	2.03	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	626	0	97.97	2.03	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/23/2010	TUR10-23	639	626	0	97.97	2.03	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/27/2010	TUR10-27	639	626	0	97.97	2.03	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/139/2010	IRN10139	639	625	0	97.81	2.19	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/175/2010	IRN10175	639	625	0	97.81	2.19	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/66/2010	IRN10-66	639	625	0	97.81	2.19	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/92/2010	IRN10-92	639	625	0	97.81	2.19	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/94/2010	IRN10-94	639	625	0	97.81	2.19	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/95/2010	IRN10-95	639	625	0	97.81	2.19	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	620	0	97.03	2.97	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	596	0	93.27	6.73	ME-SA	PanAsia-2
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{TER-08}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	591	0	92.49	7.51	ME-SA	PanAsia-2 ^{SAN-09}
6	O/PAK/16/2010	PAK10-16	639	590	0	92.33	7.67	ME-SA	PanAsia-2 ^{PUN-10}
7	O/IRN/18/2010	IRN10-18	639	589	0	92.18	7.82	ME-SA	PanAsia-2 ^{BAL-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	577	0	90.30	9.70	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	566	1	88.71	11.29	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.0

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Serotype: O WRLFMD Ref No: TUR/12/2011 Batch No: WRLFMD/2011/00013 Sender Ref: 170/2011 Location: Gedizligidirlimerli, Havza Polati, Ankara, Central Anatolia, Turkey Date collected: 17/01/2011 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 11/03/2011 Species: Not Known Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR11-12.SEQ Date sequence last updated: 18/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 12 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/TUR/1/2011	TUR11-01	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/32/2010	TUR10-32	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/153/2010* (FMDI)	TUR10-AR	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/TUR/39/2010	TUR10-39	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/66/2010	IRN10-66	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/92/2010	IRN10-92	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/94/2010	IRN10-94	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/95/2010	IRN10-95	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/1003/2010* (FMDI)	TUR10-BG	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	627	0	98.12	1.88	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	600	0	93.90	6.10	ME-SA	PanAsia-2
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	600	0	93.90	6.10	ME-SA	PanAsia-2 ^{TER-08}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{SAN-09}
6	O/PAK/16/2010	PAK10-16	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{PUN-10}
7	O/IRN/18/2010	IRN10-18	639	593	0	92.80	7.20	ME-SA	PanAsia-2 ^{BAL-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/25/2011 Batch No: WRLFMD/2011/00013 Sender Ref: 328/2011 Location: Kerer, Kemah, Erzincan, East Anatolia, Turkey Date collected: 25/01/2011 Date received by WRLFMD: 25/02/2011 Date received for sequencing: 11/03/2011 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 23/03/2011 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR11-25.SEQ Date sequence last updated: 18/03/2011 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2693 Min. no. of nt for comparison: 600 Total turn-around time: 26 days Sequencing time: 12 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/TUR/1/2011	TUR11-01	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/32/2010	TUR10-32	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/94/2010	IRN10-94	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/12/2011	TUR11-12	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
5	O/TUR/153/2010* (FMDI)	TUR10-AR	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
6	O/TUR/154/2010* (FMDI)	TUR10-AS	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/39/2010	TUR10-39	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/66/2010	IRN10-66	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/92/2010	IRN10-92	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/95/2010	IRN10-95	639	632	0	98.90	1.10	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	625	0	97.81	2.19	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{FAR-09}
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	601	0	94.05	5.95	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/8/2005	IRN05-08	639	598	0	93.58	6.42	ME-SA	PanAsia-2
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{SAN-09}
6	O/PAK/16/2010	PAK10-16	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{PUN-10}
7	O/IRN/18/2010	IRN10-18	639	591	0	92.49	7.51	ME-SA	PanAsia-2 ^{BAL-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	566	1	88.71	11.29	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.0

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Report on FMDV O in Turkey in 2010-2011

Batch: WRLFMD/2011/00013

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

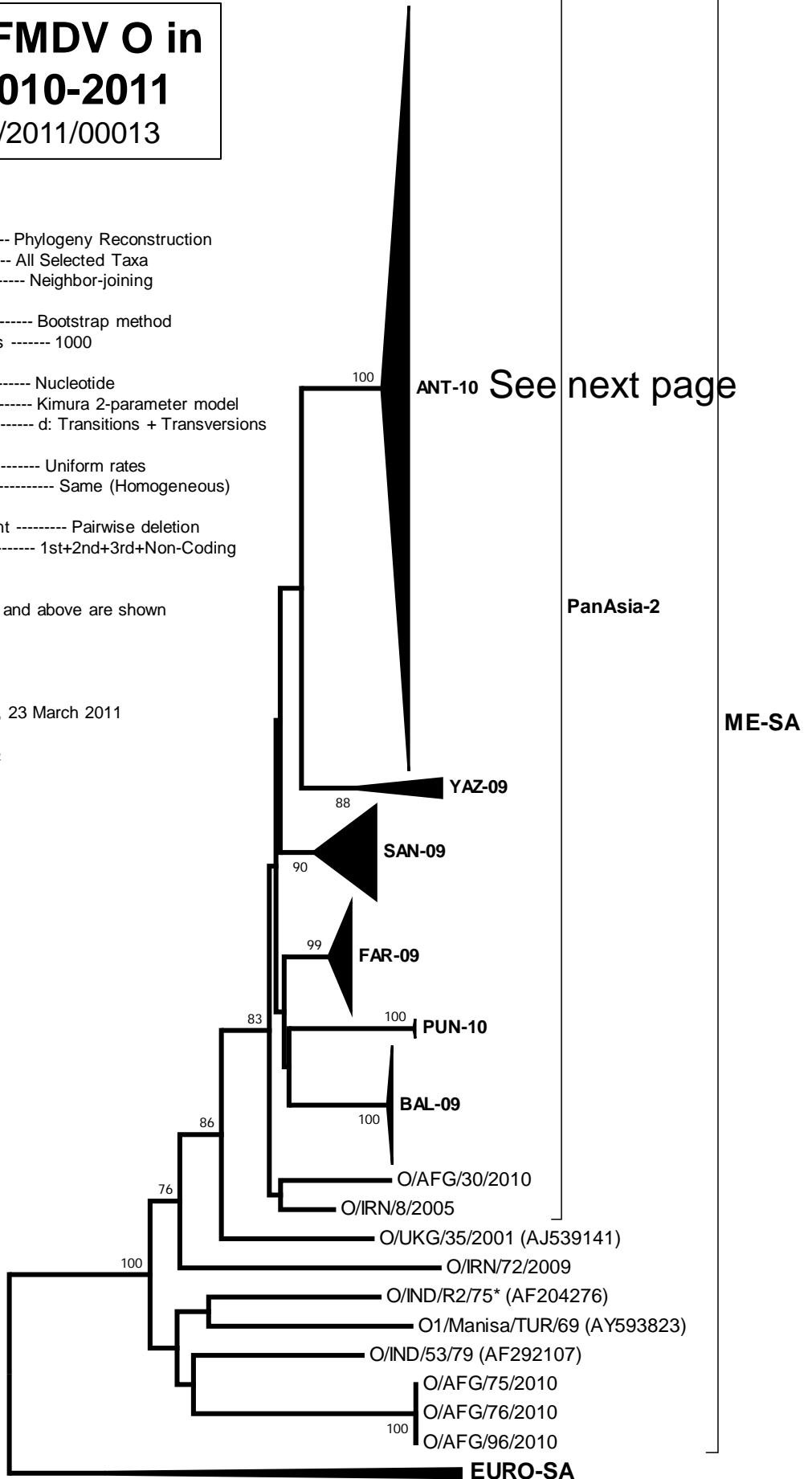
No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 23 March 2011

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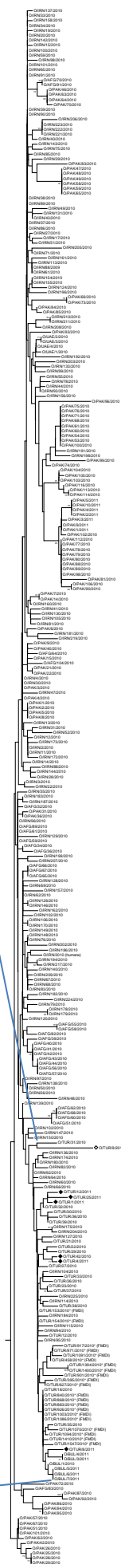
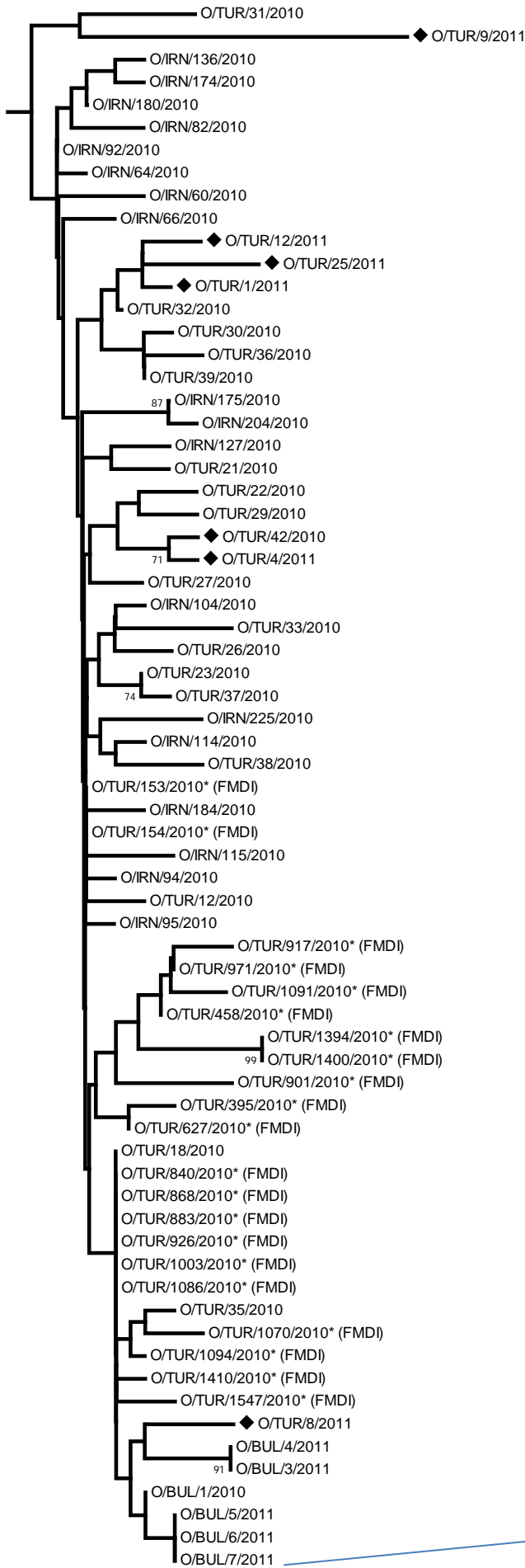
ANT-10 See next page

PanAsia-2

ME-SA

EURO-SA

0.02



ME-SA/PanAsia-2-ANT-10