



INSTITUTE FOR ANIMAL HEALTH
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FMD Sequencing Report

Lab Reference WRL Batch Number: WRLFMD/2010/00031
Sender Details: [REDACTED]

Date Received: 2nd September 2010
Country of Origin: Turkey
Date Reported: 8th October 2010

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:



Date: 8/10/10

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: 7 October 2010

FMDV type O

Country: Turkey

Period: 2010

No. of isolates: 20

BATCH: WRLFMD/2010/00031



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FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: O WRLFMD Ref No: TUR/9/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 394/10 Location: Evyaba Mau, Erbaa, Tokat, Black Sea, Turkey Date collected: 16/05/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Sheep Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{SAN-09} Sequence filename: TUR10-09.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/155/2010* (FMDI)	TUR10-AT	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{SAN-09}
2	O/TUR/60/2010* (FMDI)	TUR10-AK	636	634	0	99.69	0.31	ME-SA	PanAsia-2 ^{SAN-09}
3	O/TUR/54/2010* (FMDI)	TUR10-AH	636	633	0	99.53	0.47	ME-SA	PanAsia-2 ^{SAN-09}
4	O/TUR/132/2010* (FMDI)	TUR10-AP	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{SAN-09}
5	O/TUR/149/2010* (FMDI)	TUR10-AQ	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{SAN-09}
6	O/TUR/156/2010* (FMDI)	TUR10-AU	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{SAN-09}
7	O/TUR/38/2010* (FMDI)	TUR10-AD	636	632	0	99.37	0.63	ME-SA	PanAsia-2 ^{SAN-09}
8	O/TUR/4/2010	TUR10-04	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{SAN-09}
9	O/TUR/264/2009* (FMDI)	TUR09-AK	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{SAN-09}
10	O/TUR/5/2010	TUR10-05	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{SAN-09}
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/TUR/264/2009* (FMDI)	TUR09-AK	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{SAN-09}
2	O/TUR/257/2008* (FMDI)	TUR08-AD	639	623	0	97.50	2.50	ME-SA	PanAsia-2 ^{TER-08}
3	O/IRN/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
4	O/IRN/31/2009	IRN09-31	639	603	0	94.37	5.63	ME-SA	PanAsia-2 ^{FAR-09}
5	O/IRN/18/2010	IRN10-18	639	598	0	93.58	6.42	ME-SA	PanAsia-2 ^{BAL-09}
6	O/IRN/88/2009	IRN09-88	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{ANT-10}
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	592	0	92.64	7.36	ME-SA	PanAsia
9	O/KUW/3/97 (DQ164904)	KUW97-03	639	577	0	90.30	9.70	ME-SA	Ind-2001a
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/10/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 545/2010 Location: Bekler, Merkez, Kars, East Anatolia, Turkey Date collected: 03/06/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{FAR-09} Sequence filename: TUR10-10.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/IRN/31/2009	IRN09-31	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{FAR-09}
2	O/IRN/60/2009	IRN09-60	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/87/2009	IRN09-87	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{FAR-09}
4	O/IRN/42/2009	IRN09-42	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
5	O/IRN/43/2009	IRN09-43	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
6	O/IRN/49/2009	IRN09-49	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
7	O/IRN/56/2009	IRN09-56	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
8	O/IRN/61/2009	IRN09-61	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
9	O/IRN/76/2009	IRN09-76	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
10	O/IRN/83/2009	IRN09-83	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
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/31/2009	IRN09-31	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{FAR-09}
2	O/IRN/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	607	0	94.99	5.01	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/18/2010	IRN10-18	639	605	0	94.68	5.32	ME-SA	PanAsia-2 ^{BAL-09}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	604	0	94.52	5.48	ME-SA	PanAsia-2 ^{SAN-09}
6	O/PAK/16/2010	PAK10-16	639	603	0	94.37	5.63	ME-SA	PanAsia-2 ^{PUN-10}
7	O/IRN/88/2009	IRN09-88	639	600	0	93.90	6.10	ME-SA	PanAsia-2 ^{ANT-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	593	0	92.80	7.20	ME-SA	PanAsia
9	O/KUW/3/97 (DQ164904)	KUW97-03	639	583	0	91.24	8.76	ME-SA	Ind-2001a
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	581	0	90.92	9.08	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/11/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 635/2010 Location: Caypinar, Merkez, Sivas, Inner Anatolia, Turkey Date collected: 17/06/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{FAR-09} Sequence filename: TUR10-11.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/72/2010* (FMDI)	TUR10-AM	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{FAR-09}
2	O/TUR/71/2010* (FMDI)	TUR10-AL	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{FAR-09}
3	O/TUR/73/2010* (FMDI)	TUR10-AN	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{FAR-09}
4	O/IRN/31/2009	IRN09-31	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{FAR-09}
5	O/IRN/60/2009	IRN09-60	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{FAR-09}
6	O/IRN/42/2009	IRN09-42	639	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{FAR-09}
7	O/IRN/43/2009	IRN09-43	639	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{FAR-09}
8	O/IRN/49/2009	IRN09-49	639	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{FAR-09}
9	O/IRN/61/2009	IRN09-61	639	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{FAR-09}
10	O/IRN/76/2009	IRN09-76	639	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{FAR-09}
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/31/2009	IRN09-31	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{FAR-09}
2	O/IRN/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
3	O/TUR/257/2008* (FMDI)	TUR08-AD	639	604	0	94.52	5.48	ME-SA	PanAsia-2 ^{TER-08}
4	O/IRN/18/2010	IRN10-18	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{BAL-09}
5	O/PAK/16/2010	PAK10-16	639	600	0	93.90	6.10	ME-SA	PanAsia-2 ^{PUN-10}
6	O/TUR/264/2009* (FMDI)	TUR09-AK	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{SAN-09}
7	O/IRN/88/2009	IRN09-88	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{ANT-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	591	0	92.49	7.51	ME-SA	PanAsia
9	O/KUW/3/97 (DQ164904)	KUW97-03	639	577	0	90.30	9.70	ME-SA	Ind-2001a
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	577	0	90.30	9.70	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/12/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 753/2010 Location: Boyuncak, Taslicay, Agri, East Anatolia, Turkey Date collected: 17/06/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-12.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/TUR/18/2010	TUR10-18	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/104/2010	IRN10104	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/114/2010	IRN10114	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/64/2010	IRN10-64	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/23/2010	TUR10-23	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	629	0	98.44	1.56	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	604	0	94.52	5.48	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{TER-08}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{SAN-09}
6	O/IRN/18/2010	IRN10-18	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{BAL-09}
7	O/PAK/16/2010	PAK10-16	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{PUN-10}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	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	570	1	89.34	10.66	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/18/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 817/2010 Location: Kurtoglu, Merkez, Gumushane, Black Sea, Turkey Date collected: 09/07/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-18.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	638	0	99.84	0.16	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	638	0	99.84	0.16	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/94/2010	IRN10-94	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/95/2010	IRN10-95	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
6	O/TUR/35/2010	TUR10-35	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/104/2010	IRN10104	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/114/2010	IRN10114	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/12/2010	TUR10-12	639	636	0	99.53	0.47	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/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	603	0	94.37	5.63	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/PAK/16/2010	PAK10-16	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{PUN-10}
6	O/IRN/18/2010	IRN10-18	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{BAL-09}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	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	570	1	89.34	10.66	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/21/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 843/2010 Location: Catak, Karwova, Bingol, East Anatolia, Turkey Date collected: 15/07/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-21.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/127/2010	IRN10127	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/18/2010	TUR10-18	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/114/2010	IRN10114	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/64/2010	IRN10-64	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	628	0	98.28	1.72	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	601	0	94.05	5.95	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	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/18/2010	IRN10-18	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{BAL-09}
6	O/TUR/264/2009* (FMDI)	TUR09-AK	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{SAN-09}
7	O/PAK/16/2010	PAK10-16	639	593	0	92.80	7.20	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	570	0	89.20	10.80	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	567	1	88.87	11.13	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/22/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 833/2010 Location: Camlica, Hendek, Sakarya, Marmara, Turkey Date collected: 16/07/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-22.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/27/2010	TUR10-27	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/29/2010	TUR10-29	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/18/2010	TUR10-18	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/30/2010	TUR10-30	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/104/2010	IRN10104	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	627	0	98.12	1.88	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	600	0	93.90	6.10	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	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	583	0	91.24	8.76	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	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/23/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 855/2010 Location: Sarnic, Altinekin, Konya, Inner Anatolia, Turkey Date collected: 19/07/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Sheep Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-23.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/37/2010	TUR10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/18/2010	TUR10-18	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/26/2010	TUR10-26	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/104/2010	IRN10104	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/114/2010	IRN10114	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	629	0	98.44	1.56	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	602	0	94.21	5.79	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/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	594	0	92.96	7.04	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/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/26/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 890/2010 Location: Bagsaray, Celtkci, Burdur, Mediterian, Turkey Date collected: 23/07/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-26.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/IRN/104/2010	IRN10104	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/23/2010	TUR10-23	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/18/2010	TUR10-18	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/37/2010	TUR10-37	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/114/2010	IRN10114	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	628	0	98.28	1.72	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	601	0	94.05	5.95	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	599	0	93.74	6.26	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/TUR/264/2009* (FMDI)	TUR09-AK	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{SAN-09}
7	O/PAK/16/2010	PAK10-16	639	593	0	92.80	7.20	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	570	0	89.20	10.80	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	567	1	88.87	11.13	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/27/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 877/2010 Location: Kopcu, Yahyali, Kayseri, Inner Anatolia, Turkey Date collected: 26/07/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-27.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/TUR/18/2010	TUR10-18	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/30/2010	TUR10-30	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/104/2010	IRN10104	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/114/2010	IRN10114	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/64/2010	IRN10-64	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	629	0	98.44	1.56	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	602	0	94.21	5.79	ME-SA	PanAsia-2
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	594	0	92.96	7.04	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/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/29/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 924/2010 Location: Salyazi, Kosei, Gumushane, Black Sea, Turkey Date collected: 02/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-29.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/22/2010	TUR10-22	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/18/2010	TUR10-18	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/104/2010	IRN10104	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/114/2010	IRN10114	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/64/2010	IRN10-64	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	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	602	0	94.21	5.79	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/IRN/18/2010	IRN10-18	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{BAL-09}
6	O/PAK/16/2010	PAK10-16	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{PUN-10}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	595	0	93.11	6.89	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/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	570	1	89.34	10.66	ME-SA	Iran-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/30/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 969/2010 Location: Engilekin, Boyabat, Sinop, Black Sea, Turkey Date collected: 09/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-30.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/39/2010	TUR10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/27/2010	TUR10-27	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/TUR/36/2010	TUR10-36	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/18/2010	TUR10-18	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/32/2010	TUR10-32	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/31/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1052/2010 Location: Yazili, Merkez, Karaman, Inner Anatolia, Turkey Date collected: 12/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-31.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/139/2010	IRN10139	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/92/2010	IRN10-92	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/94/2010	IRN10-94	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/95/2010	IRN10-95	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/18/2010	TUR10-18	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/21/2010	TUR10-21	639	632	0	98.90	1.10	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/104/2010	IRN10104	639	631	0	98.75	1.25	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/114/2010	IRN10114	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	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	601	0	94.05	5.95	ME-SA	PanAsia-2
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	595	0	93.11	6.89	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	572	1	89.66	10.34	ME-SA	Irn-2001
10	O/KUW/3/97 (DQ164904)	KUW97-03	639	572	0	89.51	10.49	ME-SA	Ind-2001a

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/32/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1080/2010 Location: Karadikmen, Canoluk, Giresun, Black Sea, Turkey Date collected: 12/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-32.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/IRN/66/2010	IRN10-66	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
5	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/TUR/39/2010	TUR10-39	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/132/2010	IRN10132	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/139/2010	IRN10139	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/150/2010	IRN10150	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/94/2010	IRN10-94	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	630	0	98.59	1.41	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	605	0	94.68	5.32	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	603	0	94.37	5.63	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/PAK/16/2010	PAK10-16	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{PUN-10}
6	O/IRN/18/2010	IRN10-18	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{BAL-09}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	596	0	93.27	6.73	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	574	0	89.83	10.17	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/33/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1027/2010 Location: Aslanpasa, Oltu, Erzerum, East Anatolia, Turkey Date collected: 13/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy2 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-33.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/66/2010	IRN10-66	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/92/2010	IRN10-92	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/94/2010	IRN10-94	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/95/2010	IRN10-95	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/18/2010	TUR10-18	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/26/2010	TUR10-26	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/32/2010	TUR10-32	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	626	0	97.97	2.03	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	599	0	93.74	6.26	ME-SA	PanAsia-2
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{TER-08}
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	591	0	92.49	7.51	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	570	0	89.20	10.80	ME-SA	Pak-98
10	O/OMN/7/2001 (DQ164941)	OMN01-07	639	567	0	88.73	11.27	ME-SA	Ind-2001b

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/35/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1079/2010 Location: Cennet Pinar, Cayirli, Erzincan, East Anatolia, Turkey Date collected: 13/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-35.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/18/2010	TUR10-18	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/114/2010	IRN10114	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/64/2010	IRN10-64	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/TUR/12/2010	TUR10-12	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	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	599	0	93.74	6.26	ME-SA	PanAsia-2 ^{TER-08}
5	O/IRN/18/2010	IRN10-18	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{BAL-09}
6	O/PAK/16/2010	PAK10-16	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{PUN-10}
7	O/TUR/264/2009* (FMDI)	TUR09-AK	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{SAN-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	574	0	89.83	10.17	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/36/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1088/2010 Location: Yenice, Izmit, Kocaeli, Marmara, Turkey Date collected: 13/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-36.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/39/2010	TUR10-39	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/30/2010	TUR10-30	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/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/18/2010	TUR10-18	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/32/2010	TUR10-32	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/104/2010	IRN10104	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	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	587	0	91.86	8.14	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
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/37/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1056/2010 Location: Korucuk, Merkez, Denizli, Egean, Turkey Date collected: 14/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-37.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/23/2010	TUR10-23	639	638	0	99.84	0.16	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
4	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
7	O/TUR/18/2010	TUR10-18	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/26/2010	TUR10-26	639	635	0	99.37	0.63	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/114/2010	IRN10114	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	628	0	98.28	1.72	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	601	0	94.05	5.95	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	599	0	93.74	6.26	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/TUR/264/2009* (FMDI)	TUR09-AK	639	594	0	92.96	7.04	ME-SA	PanAsia-2 ^{SAN-09}
7	O/PAK/16/2010	PAK10-16	639	593	0	92.80	7.20	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	570	0	89.20	10.80	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	567	1	88.87	11.13	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: O WRLFMD Ref No: TUR/38/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1046/2010 Location: Kasbelen, Merkez, Usak, Egean, Turkey Date collected: 15/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-38.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/IRN/114/2010	IRN10114	639	635	0	99.37	0.63	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/18/2010	TUR10-18	639	634	0	99.22	0.78	ME-SA	PanAsia-2 ^{ANT-10}
8	O/IRN/104/2010	IRN10104	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
9	O/IRN/64/2010	IRN10-64	639	633	0	99.06	0.94	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/82/2010	IRN10-82	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	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	601	0	94.05	5.95	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/IRN/18/2010	IRN10-18	639	596	0	93.27	6.73	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	594	0	92.96	7.04	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/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	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 WRLFMD Ref No: TUR/39/2010 Batch No: WRLFMD/2010/00031 Sender Ref: 1095/2010 Location: Tatlicak, Ladik, Somsun, Black Sea, Turkey Date collected: 15/08/2010 Date received by WRLFMD: 02/09/2010 Date received for sequencing: 27/09/2010 Species: Cattle Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 05/10/2010 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ME-SA Genotype/strain: PanAsia-2 ^{ANT-10} Sequence filename: TUR10-39.SEQ Date sequence last updated: 03/10/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2292 Min. no. of nt for comparison: 600 Total turn-around time: 33 days Sequencing time: 8 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/30/2010	TUR10-30	639	638	0	99.84	0.16	ME-SA	PanAsia-2 ^{ANT-10}
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
4	O/TUR/36/2010	TUR10-36	639	637	0	99.69	0.31	ME-SA	PanAsia-2 ^{ANT-10}
5	O/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
6	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
7	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
8	O/TUR/18/2010	TUR10-18	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
9	O/TUR/32/2010	TUR10-32	639	636	0	99.53	0.47	ME-SA	PanAsia-2 ^{ANT-10}
10	O/IRN/104/2010	IRN10104	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	629	0	98.44	1.56	ME-SA	PanAsia-2 ^{ANT-10}
2	O/IRN/31/2009	IRN09-31	639	604	0	94.52	5.48	ME-SA	PanAsia-2 ^{FAR-09}
3	O/IRN/8/2005	IRN05-08	639	602	0	94.21	5.79	ME-SA	PanAsia-2
4	O/TUR/257/2008* (FMDI)	TUR08-AD	639	602	0	94.21	5.79	ME-SA	PanAsia-2 ^{TER-08}
5	O/TUR/264/2009* (FMDI)	TUR09-AK	639	597	0	93.43	6.57	ME-SA	PanAsia-2 ^{SAN-09}
6	O/PAK/16/2010	PAK10-16	639	596	0	93.27	6.73	ME-SA	PanAsia-2 ^{PUN-10}
7	O/IRN/18/2010	IRN10-18	639	595	0	93.11	6.89	ME-SA	PanAsia-2 ^{BAL-09}
8	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
9	O/PAK/16/2003 (DQ165068)	PAK03-16	639	573	0	89.67	10.33	ME-SA	Pak-98
10	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001

nt, nucleotides

*, not a WRLFMD reference number

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Report on FMDV O in Turkey in 2010

Batch: WRLFMD/2010/00031

Software: MEGA 4.0
 No. of Taxa : 369
 Data File : n:\evd\meg\db\fmdv\o\PAK2010a.meg
 Data Title : O Pakistan & Turkey 2010
 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 : 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, 7 October 2010

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ME-SA

Report on FMDV O in Turkey in 2010

Batch: WRLFMD/2010/00031

Software: MEGA 4.0

No. of Taxa : 369

Data File : n:\evd\meg\db\fmdv\o\PAK2010a.meg

Data Title : O Pakistan & Turkey 2010

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 : 639

No Of Bootstrap Reps = 1000

Only bootstrap values of 70% and above are shown

* , not a WRLFMD Ref. No.

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