

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

Genotyping Report

Report Date for this Batch: 4 August 2010

FMDV type O

Country: Iran

Period: 2010

No. of isolates: 78

BATCH: WRLFMD/2010/00024



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

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/59/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-111	
Location: Chaharmahal and Bakhtiari, Iran	Topotype: ME-SA
Date collected: 27/03/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-59.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/65/2010	IRN10-65	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Irn-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/60/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-91	
Location: Semnan, Iran	Topotype: ME-SA
Date collected: 01/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-60.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/64/2010	IRN10-64	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/TUR/153/2010* (FMDI)	TUR10-AR	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/132/2010	IRN10132	639	634	0	99.22	0.78	ME-SA	PanAsia-2
6	O/IRN/139/2010	IRN10139	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/150/2010	IRN10150	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/66/2010	IRN10-66	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/94/2010	IRN10-94	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/95/2010	IRN10-95	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	572	1	89.66	10.34	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	572	0	89.51	10.49	ME-SA	Ind-2001a
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
7	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
8	O/UAE/4/2008	UAE08-04	636	562	0	88.36	11.64	ME-SA	Ind-2001c
9	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/61/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-87	
Location: Semnan, Iran	Topotype: ME-SA
Date collected: 02/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-61.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/88/2009	IRN09-88	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/113/2010	IRN10113	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/62/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-100	
Location: Esfahan, Iran	Topotype: ME-SA
Date collected: 03/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-62.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/106/2010	IRN10106	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/120/2010	IRN10120	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/126/2010	IRN10126	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/146/2010	IRN10146	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/148/2010	IRN10148	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/149/2010	IRN10149	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/170/2010	IRN10170	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/64/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-117	
Location: Razavi Khorasan, Iran	Topotype: ME-SA
Date collected: 04/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-64.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/92/2010	IRN10-92	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/132/2010	IRN10132	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/139/2010	IRN10139	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/150/2010	IRN10150	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/66/2010	IRN10-66	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/104/2010	IRN10104	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	573	0	89.67	10.33	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/65/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-41	
Location: Hamedan, Iran	Topotype: ME-SA
Date collected: 05/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-65.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/66/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-119	
Location: Razavi Khorasan, Iran	Topotype: ME-SA
Date collected: 05/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-66.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy2	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/132/2010	IRN10132	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/139/2010	IRN10139	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/150/2010	IRN10150	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	574	0	89.83	10.17	ME-SA	Pak-98
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
7	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
8	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
10	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/67/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-120	
Location: Kermanshah, Iran	Topotype: ME-SA
Date collected: 05/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-67.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/83/2010	IRN10-83	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/68/2010	IRN10-68	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/106/2010	IRN10106	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/120/2010	IRN10120	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/126/2010	IRN10126	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/140/2010	IRN10140	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/146/2010	IRN10146	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/148/2010	IRN10148	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/149/2010	IRN10149	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
10	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/68/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-51	
Location: Khuzestan, Iran	Topotype: ME-SA
Date collected: 06/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-68.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/83/2010	IRN10-83	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/67/2010	IRN10-67	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/106/2010	IRN10106	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/120/2010	IRN10120	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/126/2010	IRN10126	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/140/2010	IRN10140	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/146/2010	IRN10146	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/148/2010	IRN10148	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/149/2010	IRN10149	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
10	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/69/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-118	
Location: Razavi Khorasan, Iran	Topotype: ME-SA
Date collected: 06/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-69.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/71/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-122	
Location: North Khorasan, Iran	Topotype: ME-SA
Date collected: 08/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-71.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	608	0	95.15	4.85	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	587	0	91.86	8.14	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	573	0	89.67	10.33	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	572	1	89.66	10.34	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	568	0	88.89	11.11	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	567	0	88.73	11.27	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/75/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-66	
Location: Qom, Iran	Topotype: ME-SA
Date collected: 10/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-75.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/100/2010	IRN10100	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/143/2010	IRN10143	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/20/2010	IRN10-20	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/33/2010	IRN10-33	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/34/2010	IRN10-34	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/37/2010	IRN10-37	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/38/2010	IRN10-38	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/39/2010	IRN10-39	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
7	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
8	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/76/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-97	
Location: Gilan, Iran	Topotype: ME-SA
Date collected: 10/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-76.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/148/2010	IRN10148	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	608	0	95.15	4.85	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/78/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-115	
Location: Lorestan, Iran	Topotype: ME-SA
Date collected: 10/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-78.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/93/2010	IRN10-93	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/44/2010	IRN10-44	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/55/2010	IRN10-55	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/160/2010	IRN10160	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/100/2010	IRN10100	639	634	0	99.22	0.78	ME-SA	PanAsia-2
6	O/IRN/101/2010	IRN10101	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/142/2010	IRN10142	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/156/2010	IRN10156	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/20/2010	IRN10-20	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/33/2010	IRN10-33	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	602	0	94.21	5.79	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/PAK/16/2003 (DQ165068)	PAK03-16	639	567	0	88.73	11.27	ME-SA	Pak-98
8	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	562	0	87.95	12.05	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/79/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-116	
Location: Lorestan, Iran	Topotype: ME-SA
Date collected: 10/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-79.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/62/2010	IRN10-62	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	568	0	88.89	11.11	ME-SA	Ind-2001b
7	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
8	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/81/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-102	
Location: Esfahan, Iran	Topotype: ME-SA
Date collected: 11/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-81.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/100/2010	IRN10100	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	574	0	89.83	10.17	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	572	1	89.66	10.34	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	572	0	89.51	10.49	ME-SA	Ind-2001a
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	568	0	88.89	11.11	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	568	0	88.89	11.11	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/82/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-38	
Location: Kordestan, Iran	Topotype: ME-SA
Date collected: 12/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-82.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy2	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/136/2010	IRN10136	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/64/2010	IRN10-64	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/TUR/153/2010* (FMDI)	TUR10-AR	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/132/2010	IRN10132	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/139/2010	IRN10139	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/150/2010	IRN10150	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/66/2010	IRN10-66	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/94/2010	IRN10-94	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Irn-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
7	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
8	O/UAE/4/2008	UAE08-04	636	562	0	88.36	11.64	ME-SA	Ind-2001c
9	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/83/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-55	
Location: Khuzestan, Iran	Topotype: ME-SA
Date collected: 12/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-83.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/67/2010	IRN10-67	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/68/2010	IRN10-68	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/140/2010	IRN10140	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/85/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-88	
Location: Semnan, Iran	Topotype: ME-SA
Date collected: 12/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-85.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/86/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-65	
Location: Qom, Iran	Topotype: ME-SA
Date collected: 13/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-86.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/88/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-114	
Location: Lorestan, Iran	Topotype: ME-SA
Date collected: 13/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-88.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/144/2010	IRN10144	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/28/2010	IRN10-28	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/14/2010	IRN10-14	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/30/2010	IRN10-30	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/4/2010	IRN10-04	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/96/2010	IRN10-96	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/PAK/3/2010	PAK10-03	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/PAK/4/2010	PAK10-04	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/100/2010	IRN10100	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/101/2010	IRN10101	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
6	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Irn-2001
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/89/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-121	
Location: North Khorasan, Iran	Topotype: ME-SA
Date collected: 13/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-89.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/90/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-36	
Location: Ardabil, Iran	Topotype: ME-SA
Date collected: 14/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-90.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/91/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-60	
Location: Tehran, Iran	Topotype: ME-SA
Date collected: 14/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-91.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/92/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-72	
Location: West Azerbaijan, Iran	Topotype: ME-SA
Date collected: 14/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-92.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/64/2010	IRN10-64	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/TUR/153/2010* (FMDI)	TUR10-AR	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/TUR/154/2010* (FMDI)	TUR10-AS	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/132/2010	IRN10132	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/139/2010	IRN10139	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/150/2010	IRN10150	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/66/2010	IRN10-66	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/94/2010	IRN10-94	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/95/2010	IRN10-95	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/104/2010	IRN10104	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	574	0	89.83	10.17	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/93/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-104	
Location: Esfahan, Iran	Topotype: ME-SA
Date collected: 14/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-93.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/44/2010	IRN10-44	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/55/2010	IRN10-55	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/160/2010	IRN10160	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/78/2010	IRN10-78	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/100/2010	IRN10100	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/101/2010	IRN10101	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/142/2010	IRN10142	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/156/2010	IRN10156	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/20/2010	IRN10-20	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/33/2010	IRN10-33	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	573	0	89.67	10.33	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	572	1	89.66	10.34	ME-SA	Iran-2001
5	O/UAE/4/2008	UAE08-04	636	569	0	89.47	10.53	ME-SA	Ind-2001c
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
7	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
8	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/94/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-76	
Location: West Azerbaijan, Iran	Topotype: ME-SA
Date collected: 15/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-94.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/95/2010	IRN10-95	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/104/2010	IRN10104	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/114/2010	IRN10114	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/115/2010	IRN10115	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/127/2010	IRN10127	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/132/2010	IRN10132	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/95/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-107	
Location: Esfahan, Iran	Topotype: ME-SA
Date collected: 15/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-95.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/94/2010	IRN10-94	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/104/2010	IRN10104	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/114/2010	IRN10114	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/115/2010	IRN10115	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/127/2010	IRN10127	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/132/2010	IRN10132	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	574	0	89.83	10.17	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
7	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
8	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
10	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/96/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-59	
Location: Tehran, Iran	Topotype: ME-SA
Date collected: 16/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-96.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/139/2010	IRN10139	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/97/2010	IRN10-97	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	608	0	95.15	4.85	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	572	1	89.66	10.34	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	572	0	89.51	10.49	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/97/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-71	
Location: Kerman, Iran	Topotype: ME-SA
Date collected: 16/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-97.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/26/2010	IRN10-26	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/50/2010	IRN10-50	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/96/2010	IRN10-96	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/139/2010	IRN10139	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/62/2010	IRN10-62	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/106/2010	IRN10106	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/120/2010	IRN10120	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/126/2010	IRN10126	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/138/2010	IRN10138	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/146/2010	IRN10146	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/98/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-74	
Location: West Azerbaijan, Iran	Topotype: ME-SA
Date collected: 16/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-98.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/100/2010	IRN10100	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/99/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-42	
Location: Markazi, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10-99.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/160/2010	IRN10160	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/93/2010	IRN10-93	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/20/2010	IRN10-20	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/33/2010	IRN10-33	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/34/2010	IRN10-34	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/37/2010	IRN10-37	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/38/2010	IRN10-38	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Irn-2001
5	O/UAE/4/2008	UAE08-04	636	568	0	89.31	10.69	ME-SA	Ind-2001c
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/PAK/16/2003 (DQ165068)	PAK03-16	639	568	0	88.89	11.11	ME-SA	Pak-98
8	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
10	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/100/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-43	
Location: Hamedan, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10100.SEQ
Date received for sequencing: 29/06/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 29 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/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/65/2010	IRN10-65	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/101/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-64	
Location: Qom, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10101.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/142/2010	IRN10142	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/65/2010	IRN10-65	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/102/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-89	
Location: Semnan, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10102.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/62/2010	IRN10-62	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/104/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-105	
Location: Esfahan, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10104.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/153/2010* (FMDI)	TUR10-AR	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/114/2010	IRN10114	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/64/2010	IRN10-64	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/115/2010	IRN10115	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/127/2010	IRN10127	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/132/2010	IRN10132	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	602	0	94.21	5.79	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	568	0	88.89	11.11	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	562	0	88.36	11.64	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	562	0	87.95	12.05	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/105/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-106	
Location: Esfahan, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10105.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/106/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-124	
Location: South Khorasan, Iran	Topotype: ME-SA
Date collected: 17/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10106.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/170/2010	IRN10170	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/109/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-39	
Location: Kordestan, Iran	Topotype: ME-SA
Date collected: 19/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10109.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/31/2009	IRN09-31	639	633	0	99.06	0.94	ME-SA	PanAsia-2
2	O/IRN/60/2009	IRN09-60	639	633	0	99.06	0.94	ME-SA	PanAsia-2
3	O/IRN/42/2009	IRN09-42	639	632	0	98.90	1.10	ME-SA	PanAsia-2
4	O/IRN/43/2009	IRN09-43	639	632	0	98.90	1.10	ME-SA	PanAsia-2
5	O/IRN/49/2009	IRN09-49	639	632	0	98.90	1.10	ME-SA	PanAsia-2
6	O/IRN/61/2009	IRN09-61	639	632	0	98.90	1.10	ME-SA	PanAsia-2
7	O/IRN/76/2009	IRN09-76	639	632	0	98.90	1.10	ME-SA	PanAsia-2
8	O/IRN/83/2009	IRN09-83	639	632	0	98.90	1.10	ME-SA	PanAsia-2
9	O/IRN/84/2009	IRN09-84	639	632	0	98.90	1.10	ME-SA	PanAsia-2
10	O/IRN/34/2009	IRN09-34	639	631	0	98.75	1.25	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	611	0	95.62	4.38	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	595	0	93.11	6.89	ME-SA	PanAsia
3	O/KUW/3/97 (DQ164904)	KUW97-03	639	581	0	90.92	9.08	ME-SA	Ind-2001a
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	579	0	90.61	9.39	ME-SA	Ind-2001b
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	576	1	90.28	9.72	ME-SA	Irn-2001
6	O/BHU/3/2009	BHU09-03	639	573	0	89.67	10.33	ME-SA	Ind-2001d
7	O/UAE/4/2008	UAE08-04	636	569	0	89.47	10.53	ME-SA	Ind-2001c
8	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
9	O/IND/53/79 (AF292107)	IND79A53	639	570	0	89.20	10.80	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	569	0	89.05	10.95	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/113/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-58	
Location: Tehran, Iran	Topotype: ME-SA
Date collected: 19/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10113.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/61/2010	IRN10-61	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/88/2009	IRN09-88	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/100/2010	IRN10100	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/101/2010	IRN10101	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/142/2010	IRN10142	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/20/2010	IRN10-20	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/33/2010	IRN10-33	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/34/2010	IRN10-34	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/37/2010	IRN10-37	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/38/2010	IRN10-38	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/114/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-73	
Location: West Azerbaijan, Iran	Topotype: ME-SA
Date collected: 19/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10114.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/153/2010* (FMDI)	TUR10-AR	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/94/2010	IRN10-94	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/95/2010	IRN10-95	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/104/2010	IRN10104	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/64/2010	IRN10-64	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/115/2010	IRN10115	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/127/2010	IRN10127	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/132/2010	IRN10132	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	602	0	94.21	5.79	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
6	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Irn-2001
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/115/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-78	
Location: West Azerbaijan, Iran	Topotype: ME-SA
Date collected: 19/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10115.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/114/2010	IRN10114	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/64/2010	IRN10-64	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/127/2010	IRN10127	639	633	0	99.06	0.94	ME-SA	PanAsia-2
10	O/IRN/132/2010	IRN10132	639	633	0	99.06	0.94	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
8	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
10	O/BHU/3/2009	BHU09-03	639	561	0	87.79	12.21	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/120/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-95	
Location: Golestan, Iran	Topotype: ME-SA
Date collected: 20/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10120.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/124/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-82	
Location: Sistan and Baluchistan, Iran	Topotype: ME-SA
Date collected: 21/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10124.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/154/2010	IRN10154	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/155/2010	IRN10155	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/20/2010	IRN10-20	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/33/2010	IRN10-33	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/34/2010	IRN10-34	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/37/2010	IRN10-37	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/38/2010	IRN10-38	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	574	0	89.83	10.17	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	573	1	89.81	10.19	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	572	0	89.51	10.49	ME-SA	Ind-2001a
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	568	0	88.89	11.11	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/126/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-94	
Location: Zanjan, Iran	Topotype: ME-SA
Date collected: 21/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10126.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/146/2010	IRN10146	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/127/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-33	
Location: Qazvin, Iran	Topotype: ME-SA
Date collected: 22/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10127.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/150/2010	IRN10150	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/94/2010	IRN10-94	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/95/2010	IRN10-95	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/104/2010	IRN10104	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/114/2010	IRN10114	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/64/2010	IRN10-64	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/115/2010	IRN10115	639	633	0	99.06	0.94	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	601	0	94.05	5.95	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	567	1	88.87	11.13	ME-SA	Iran-2001
5	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	567	0	88.73	11.27	ME-SA	Ind-2001a
7	O/OMN/7/2001 (DQ164941)	OMN01-07	639	567	0	88.73	11.27	ME-SA	Ind-2001b
8	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	561	0	87.79	12.21	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/128/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-77	
Location: West Azerbaijan, Iran	Topotype: ME-SA
Date collected: 22/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10128.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy2	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/62/2010	IRN10-62	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/129/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-81	
Location: Sistan and Baluchistan, Iran	Topotype: ME-SA
Date collected: 22/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10129.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/96/2010	IRN10-96	639	635	0	99.37	0.63	ME-SA	PanAsia-2
2	O/IRN/139/2010	IRN10139	639	634	0	99.22	0.78	ME-SA	PanAsia-2
3	O/IRN/62/2010	IRN10-62	639	634	0	99.22	0.78	ME-SA	PanAsia-2
4	O/IRN/97/2010	IRN10-97	639	634	0	99.22	0.78	ME-SA	PanAsia-2
5	O/IRN/106/2010	IRN10106	639	633	0	99.06	0.94	ME-SA	PanAsia-2
6	O/IRN/120/2010	IRN10120	639	633	0	99.06	0.94	ME-SA	PanAsia-2
7	O/IRN/126/2010	IRN10126	639	633	0	99.06	0.94	ME-SA	PanAsia-2
8	O/IRN/146/2010	IRN10146	639	633	0	99.06	0.94	ME-SA	PanAsia-2
9	O/IRN/148/2010	IRN10148	639	633	0	99.06	0.94	ME-SA	PanAsia-2
10	O/IRN/149/2010	IRN10149	639	633	0	99.06	0.94	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	568	0	88.89	11.11	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	562	0	87.95	12.05	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	562	0	87.95	12.05	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	561	0	87.79	12.21	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/130/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-110	
Location: Chaharmahal and Bakhtiari, Iran	Topotype: ME-SA
Date collected: 22/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10130.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/BHU/3/2009	BHU09-03	639	567	0	88.73	11.27	ME-SA	Ind-2001d
8	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/131/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-125	
Location: Bushehr, Iran	Topotype: ME-SA
Date collected: 22/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10131.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/43/2010	IRN10-43	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/100/2010	IRN10100	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/101/2010	IRN10101	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/142/2010	IRN10142	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/20/2010	IRN10-20	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/IRN/33/2010	IRN10-33	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/IRN/34/2010	IRN10-34	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/37/2010	IRN10-37	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/38/2010	IRN10-38	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/39/2010	IRN10-39	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/IND/53/79 (AF292107)	IND79A53	639	568	0	88.89	11.11	ME-SA	unnamed
8	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/132/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-127	
Location: Fars, Iran	Topotype: ME-SA
Date collected: 22/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10132.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/139/2010	IRN10139	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/150/2010	IRN10150	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/96/2010	IRN10-96	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/147/2010	IRN10147	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/62/2010	IRN10-62	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/66/2010	IRN10-66	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O WRLFMD Ref No: IRN/133/2010 Batch No: WRLFMD/2010/00024 Sender Ref: IR-89-67 Location: Qom, Iran Date collected: 23/04/2010 Date received by WRLFMD: 26/05/2010 Date received for sequencing: 06/07/2010 Species: Sheep Material used: BTy1 Region sequenced: VP1 RT-PCR primers: O-1C244F/EUR-2B52R O-1C272F/EUR-2B52R	Report date: 28/07/2010 Reported by: N.J. Knowles Checked by: V. Mioulet Topotype: ME-SA Genotype/strain: PanAsia-2 Sequence filename: IRN10133.SEQ Date sequence last updated: 27/07/2010 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 2234 Min. no. of nt for comparison: 600 Total turn-around time: 63 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/IRN/160/2010	IRN10160	639	635	0	99.37	0.63	ME-SA	PanAsia-2
2	O/IRN/93/2010	IRN10-93	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/100/2010	IRN10100	639	634	0	99.22	0.78	ME-SA	PanAsia-2
4	O/IRN/101/2010	IRN10101	639	634	0	99.22	0.78	ME-SA	PanAsia-2
5	O/IRN/142/2010	IRN10142	639	634	0	99.22	0.78	ME-SA	PanAsia-2
6	O/IRN/20/2010	IRN10-20	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/33/2010	IRN10-33	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/34/2010	IRN10-34	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/37/2010	IRN10-37	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/38/2010	IRN10-38	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	602	0	94.21	5.79	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	568	1	89.03	10.97	ME-SA	Irn-2001
6	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
7	O/KUW/3/97 (DQ164904)	KUW97-03	639	567	0	88.73	11.27	ME-SA	Ind-2001a
8	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	561	0	87.79	12.21	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/135/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-34	
Location: Ardabil, Iran	Topotype: ME-SA
Date collected: 24/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10135.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/43/2009	IRN09-43	639	629	0	98.44	1.56	ME-SA	PanAsia-2
2	O/IRN/84/2009	IRN09-84	639	629	0	98.44	1.56	ME-SA	PanAsia-2
3	O/IRN/85/2009	IRN09-85	639	629	0	98.44	1.56	ME-SA	PanAsia-2
4	O/IRN/31/2009	IRN09-31	639	628	0	98.28	1.72	ME-SA	PanAsia-2
5	O/IRN/51/2009	IRN09-51	639	628	0	98.28	1.72	ME-SA	PanAsia-2
6	O/IRN/60/2009	IRN09-60	639	628	0	98.28	1.72	ME-SA	PanAsia-2
7	O/IRN/42/2009	IRN09-42	639	627	0	98.12	1.88	ME-SA	PanAsia-2
8	O/IRN/49/2009	IRN09-49	639	627	0	98.12	1.88	ME-SA	PanAsia-2
9	O/IRN/61/2009	IRN09-61	639	627	0	98.12	1.88	ME-SA	PanAsia-2
10	O/IRN/76/2009	IRN09-76	639	627	0	98.12	1.88	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	600	0	93.90	6.10	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	589	0	92.18	7.82	ME-SA	PanAsia
3	O/KUW/3/97 (DQ164904)	KUW97-03	639	576	0	90.14	9.86	ME-SA	Ind-2001a
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	568	0	88.89	11.11	ME-SA	Ind-2001b
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	565	1	88.56	11.44	ME-SA	Irn-2001
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	565	0	88.42	11.58	ME-SA	Pak-98
7	O/BHU/3/2009	BHU09-03	639	562	0	87.95	12.05	ME-SA	Ind-2001d
8	O/UAE/4/2008	UAE08-04	636	558	0	87.74	12.26	ME-SA	Ind-2001c
9	O/IND/53/79 (AF292107)	IND79A53	639	560	0	87.64	12.36	ME-SA	unnamed
10	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	557	0	87.17	12.83	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/136/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-35	
Location: Ardabil, Iran	Topotype: ME-SA
Date collected: 24/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10136.SEQ
Date received for sequencing: 06/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/92/2010	IRN10-92	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/64/2010	IRN10-64	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/82/2010	IRN10-82	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/TUR/153/2010* (FMDI)	TUR10-AR	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/TUR/154/2010* (FMDI)	TUR10-AS	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/132/2010	IRN10132	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/139/2010	IRN10139	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/150/2010	IRN10150	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/66/2010	IRN10-66	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/94/2010	IRN10-94	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Irn-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
7	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
8	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
9	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/137/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-37	
Location: Kordestan, Iran	Topotype: ME-SA
Date collected: 24/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10137.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/138/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-67	
Location: Kerman, Iran	Topotype: ME-SA
Date collected: 24/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10138.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/62/2010	IRN10-62	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/97/2010	IRN10-97	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/106/2010	IRN10106	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/120/2010	IRN10120	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/126/2010	IRN10126	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/146/2010	IRN10146	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/148/2010	IRN10148	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/149/2010	IRN10149	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	568	0	88.89	11.11	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
9	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/IND/53/79 (AF292107)	IND79A53	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/139/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-29	
Location: Fars, Iran	Topotype: ME-SA
Date collected: 25/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10139.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/96/2010	IRN10-96	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/132/2010	IRN10132	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/150/2010	IRN10150	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/62/2010	IRN10-62	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/97/2010	IRN10-97	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/106/2010	IRN10106	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/120/2010	IRN10120	639	636	0	99.53	0.47	ME-SA	PanAsia-2
9	O/IRN/126/2010	IRN10126	639	636	0	99.53	0.47	ME-SA	PanAsia-2
10	O/IRN/146/2010	IRN10146	639	636	0	99.53	0.47	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	573	1	89.81	10.19	ME-SA	Irn-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	573	0	89.67	10.33	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	573	0	89.67	10.33	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	573	0	89.67	10.33	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	567	0	88.73	11.27	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/140/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-41	
Location: Markazi, Iran	Topotype: ME-SA
Date collected: 25/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10140.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/83/2010	IRN10-83	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/67/2010	IRN10-67	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/68/2010	IRN10-68	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/106/2010	IRN10106	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/120/2010	IRN10120	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/126/2010	IRN10126	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/146/2010	IRN10146	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/148/2010	IRN10148	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/149/2010	IRN10149	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/141/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-123	
Location: South Khorasan, Iran	Topotype: ME-SA
Date collected: 25/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10141.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Goat	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/71/2009	IRN09-71	639	629	0	98.44	1.56	ME-SA	PanAsia-2
2	O/IRN/86/2009	IRN09-86	639	628	0	98.28	1.72	ME-SA	PanAsia-2
3	O/IRN/23/2010	IRN10-23	639	626	0	97.97	2.03	ME-SA	PanAsia-2
4	O/IRN/24/2010	IRN10-24	639	626	0	97.97	2.03	ME-SA	PanAsia-2
5	O/IRN/22/2007	IRN07-22	639	616	0	96.40	3.60	ME-SA	PanAsia-2
6	O/PAK/15/2007	PAK07-15	639	616	0	96.40	3.60	ME-SA	PanAsia-2
7	O/PAK/21/2007	PAK07-21	639	616	0	96.40	3.60	ME-SA	PanAsia-2
8	O/PAK/32/2007	PAK07-32	639	616	0	96.40	3.60	ME-SA	PanAsia-2
9	O/PAK/33/2007	PAK07-33	639	616	0	96.40	3.60	ME-SA	PanAsia-2
10	O/PAK/35/2005 (FJ798166)	PAK05-35	639	616	0	96.40	3.60	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	601	0	94.05	5.95	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/KUW/3/97 (DQ164904)	KUW97-03	639	580	0	90.77	9.23	ME-SA	Ind-2001a
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	576	0	90.14	9.86	ME-SA	Ind-2001b
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	572	1	89.66	10.34	ME-SA	Irn-2001
6	O/UAE/4/2008	UAE08-04	636	570	0	89.62	10.38	ME-SA	Ind-2001c
7	O/IND/53/79 (AF292107)	IND79A53	639	569	0	89.05	10.95	ME-SA	unnamed
8	O/BHU/3/2009	BHU09-03	639	567	0	88.73	11.27	ME-SA	Ind-2001d
9	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed
10	O1/Manisa/TUR/69 (AY593823)	TUR69--G	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/142/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-30	
Location: Qazvin, Iran	Topotype: ME-SA
Date collected: 26/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10142.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	639	0	100.00	0.00	ME-SA	PanAsia-2
3	O/IRN/20/2010	IRN10-20	639	639	0	100.00	0.00	ME-SA	PanAsia-2
4	O/IRN/33/2010	IRN10-33	639	639	0	100.00	0.00	ME-SA	PanAsia-2
5	O/IRN/34/2010	IRN10-34	639	639	0	100.00	0.00	ME-SA	PanAsia-2
6	O/IRN/37/2010	IRN10-37	639	639	0	100.00	0.00	ME-SA	PanAsia-2
7	O/IRN/38/2010	IRN10-38	639	639	0	100.00	0.00	ME-SA	PanAsia-2
8	O/IRN/39/2010	IRN10-39	639	639	0	100.00	0.00	ME-SA	PanAsia-2
9	O/IRN/59/2010	IRN10-59	639	639	0	100.00	0.00	ME-SA	PanAsia-2
10	O/IRN/65/2010	IRN10-65	639	639	0	100.00	0.00	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	607	0	94.99	5.01	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	586	0	91.71	8.29	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	567	0	88.73	11.27	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/143/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-62	
Location: Qom, Iran	Topotype: ME-SA
Date collected: 26/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10143.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/144/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-68	
Location: Kerman, Iran	Topotype: ME-SA
Date collected: 26/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10144.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Goat	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/28/2010	IRN10-28	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/30/2010	IRN10-30	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/4/2010	IRN10-04	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/88/2010	IRN10-88	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/96/2010	IRN10-96	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/PAK/3/2010	PAK10-03	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/PAK/4/2010	PAK10-04	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/11/2010	IRN10-11	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	569	0	89.05	10.95	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/146/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-92	
Location: Zanjan, Iran	Topotype: ME-SA
Date collected: 26/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10146.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/126/2010	IRN10126	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/147/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-130	
Location: Fars, Iran	Topotype: ME-SA
Date collected: 26/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10147.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/132/2010	IRN10132	639	635	0	99.37	0.63	ME-SA	PanAsia-2
2	O/IRN/139/2010	IRN10139	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/150/2010	IRN10150	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/92/2010	IRN10-92	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/64/2010	IRN10-64	639	634	0	99.22	0.78	ME-SA	PanAsia-2
6	O/IRN/96/2010	IRN10-96	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/TUR/153/2010* (FMDI)	TUR10-AR	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/TUR/154/2010* (FMDI)	TUR10-AS	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/62/2010	IRN10-62	639	633	0	99.06	0.94	ME-SA	PanAsia-2
10	O/IRN/66/2010	IRN10-66	639	633	0	99.06	0.94	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	582	0	91.08	8.92	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	572	0	89.51	10.49	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/148/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-31	
Location: Qazvin, Iran	Topotype: ME-SA
Date collected: 27/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10148.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/76/2010	IRN10-76	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	608	0	95.15	4.85	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	571	0	89.36	10.64	ME-SA	Pak-98
5	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	566	0	88.58	11.42	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/149/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-32	
Location: Qazvin, Iran	Topotype: ME-SA
Date collected: 27/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10149.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/170/2010	IRN10170	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/150/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-49	
Location: Hormozgan, Iran	Topotype: ME-SA
Date collected: 27/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10150.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/132/2010	IRN10132	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/139/2010	IRN10139	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/92/2010	IRN10-92	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/64/2010	IRN10-64	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/96/2010	IRN10-96	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/TUR/153/2010* (FMDI)	TUR10-AR	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/TUR/154/2010* (FMDI)	TUR10-AS	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/127/2010	IRN10127	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/147/2010	IRN10147	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/62/2010	IRN10-62	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/PAK/16/2003 (DQ165068)	PAK03-16	639	574	0	89.83	10.17	ME-SA	Pak-98
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Irn-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	571	0	89.36	10.64	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
8	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/154/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-85	
Location: Sistan and Baluchistan, Iran	Topotype: ME-SA
Date collected: 30/04/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10154.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/155/2010	IRN10155	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/155/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-86	
Location: Sistan and Baluchistan, Iran	Topotype: ME-SA
Date collected: 09/05/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10155.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/154/2010	IRN10154	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/156/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-126	
Location: Yazd, Iran	Topotype: ME-SA
Date collected: 09/05/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10156.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/93/2010	IRN10-93	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/20/2010	IRN10-20	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/33/2010	IRN10-33	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/34/2010	IRN10-34	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/37/2010	IRN10-37	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/38/2010	IRN10-38	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/39/2010	IRN10-39	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	572	0	89.51	10.49	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
5	O/UAE/4/2008	UAE08-04	636	568	0	89.31	10.69	ME-SA	Ind-2001c
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
7	O/PAK/16/2003 (DQ165068)	PAK03-16	639	568	0	88.89	11.11	ME-SA	Pak-98
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	561	0	87.79	12.21	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/157/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-47	
Location: South Khorasan, Iran	Topotype: ME-SA
Date collected: 11/05/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10157.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/62/2010	IRN10-62	639	635	0	99.37	0.63	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	634	0	99.22	0.78	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	634	0	99.22	0.78	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	634	0	99.22	0.78	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	634	0	99.22	0.78	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	634	0	99.22	0.78	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	634	0	99.22	0.78	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	634	0	99.22	0.78	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	634	0	99.22	0.78	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	634	0	99.22	0.78	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	603	0	94.37	5.63	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Irn-2001
4	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
6	O/OMN/7/2001 (DQ164941)	OMN01-07	639	568	0	88.89	11.11	ME-SA	Ind-2001b
7	O/UAE/4/2008	UAE08-04	636	562	0	88.36	11.64	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	562	0	87.95	12.05	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/158/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-146	
Location: Zanjan, Iran	Topotype: ME-SA
Date collected: 13/05/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10158.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
7	O/UAE/4/2008	UAE08-04	636	565	0	88.84	11.16	ME-SA	Ind-2001c
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d
10	O/IND/R2/75* (AF204276)	IND75--A	639	564	0	88.26	11.74	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/160/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-132	
Location: Isolated IVO, Iran	Topotype: ME-SA
Date collected: 01/01/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10160.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Not Known	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/100/2010	IRN10100	639	638	0	99.84	0.16	ME-SA	PanAsia-2
2	O/IRN/101/2010	IRN10101	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/142/2010	IRN10142	639	638	0	99.84	0.16	ME-SA	PanAsia-2
4	O/IRN/20/2010	IRN10-20	639	638	0	99.84	0.16	ME-SA	PanAsia-2
5	O/IRN/33/2010	IRN10-33	639	638	0	99.84	0.16	ME-SA	PanAsia-2
6	O/IRN/34/2010	IRN10-34	639	638	0	99.84	0.16	ME-SA	PanAsia-2
7	O/IRN/37/2010	IRN10-37	639	638	0	99.84	0.16	ME-SA	PanAsia-2
8	O/IRN/38/2010	IRN10-38	639	638	0	99.84	0.16	ME-SA	PanAsia-2
9	O/IRN/39/2010	IRN10-39	639	638	0	99.84	0.16	ME-SA	PanAsia-2
10	O/IRN/59/2010	IRN10-59	639	638	0	99.84	0.16	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
5	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
6	O/UAE/4/2008	UAE08-04	636	567	0	89.15	10.85	ME-SA	Ind-2001c
7	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
8	O/IND/53/79 (AF292107)	IND79A53	639	566	0	88.58	11.42	ME-SA	unnamed
9	O/IND/R2/75* (AF204276)	IND75--A	639	566	0	88.58	11.42	ME-SA	unnamed
10	O/BHU/3/2009	BHU09-03	639	565	0	88.42	11.58	ME-SA	Ind-2001d

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/161/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-133	
Location: Isolated IVO, Iran	Topotype: ME-SA
Date collected: 01/01/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10161.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Not Known	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/61/2010	IRN10-61	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/88/2009	IRN09-88	639	636	0	99.53	0.47	ME-SA	PanAsia-2
3	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/113/2010	IRN10113	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/20/2010	IRN10-20	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/33/2010	IRN10-33	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/34/2010	IRN10-34	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/37/2010	IRN10-37	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	566	0	88.99	11.01	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	568	0	88.89	11.11	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	565	0	88.42	11.58	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/162/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-134	
Location: Isolated IVO, Iran	Topotype: ME-SA
Date collected: 01/01/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10162.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Not Known	No. of Nt determined: 639
Material used: BTy2	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: O-1C244F/EUR-2B52R	Total no. of comparisons: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/62/2010	IRN10-62	639	636	0	99.53	0.47	ME-SA	PanAsia-2
2	O/IRN/106/2010	IRN10106	639	635	0	99.37	0.63	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	635	0	99.37	0.63	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	635	0	99.37	0.63	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	635	0	99.37	0.63	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	635	0	99.37	0.63	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	635	0	99.37	0.63	ME-SA	PanAsia-2
8	O/IRN/170/2010	IRN10170	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/26/2010	IRN10-26	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/50/2010	IRN10-50	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	604	0	94.52	5.48	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	581	0	90.92	9.08	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Iran-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	568	0	88.89	11.11	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	568	0	88.89	11.11	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	568	0	88.89	11.11	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed
9	O/BHU/3/2009	BHU09-03	639	562	0	87.95	12.05	ME-SA	Ind-2001d
10	O/IND/53/79 (AF292107)	IND79A53	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/170/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-142	
Location: Isolated IVO, Iran	Topotype: ME-SA
Date collected: 01/01/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10170.SEQ
Date received for sequencing: 16/07/2010	Date sequence last updated: 27/07/2010
Species: Not Known	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 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/IRN/106/2010	IRN10106	639	639	0	100.00	0.00	ME-SA	PanAsia-2
2	O/IRN/62/2010	IRN10-62	639	638	0	99.84	0.16	ME-SA	PanAsia-2
3	O/IRN/120/2010	IRN10120	639	637	0	99.69	0.31	ME-SA	PanAsia-2
4	O/IRN/126/2010	IRN10126	639	637	0	99.69	0.31	ME-SA	PanAsia-2
5	O/IRN/146/2010	IRN10146	639	637	0	99.69	0.31	ME-SA	PanAsia-2
6	O/IRN/148/2010	IRN10148	639	637	0	99.69	0.31	ME-SA	PanAsia-2
7	O/IRN/149/2010	IRN10149	639	637	0	99.69	0.31	ME-SA	PanAsia-2
8	O/IRN/26/2010	IRN10-26	639	637	0	99.69	0.31	ME-SA	PanAsia-2
9	O/IRN/50/2010	IRN10-50	639	637	0	99.69	0.31	ME-SA	PanAsia-2
10	O/IRN/69/2010	IRN10-69	639	637	0	99.69	0.31	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	583	0	91.24	8.76	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	570	1	89.34	10.66	ME-SA	Irn-2001
4	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
5	O/OMN/7/2001 (DQ164941)	OMN01-07	639	570	0	89.20	10.80	ME-SA	Ind-2001b
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	564	0	88.68	11.32	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/172/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-144	
Location: Isolated RAZI, Iran	Topotype: ME-SA
Date collected: 01/01/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10172.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
Species: Not Known	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/11/2010	IRN10-11	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/2/2010	IRN10-02	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/12/2010	IRN10-12	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/30/2010	IRN10-30	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/4/2010	IRN10-04	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/PAK/3/2010	PAK10-03	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/PAK/4/2010	PAK10-04	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	605	0	94.68	5.32	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	584	0	91.39	8.61	ME-SA	PanAsia
3	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
4	O/IRN/61/2001 (DQ164896)	IRN01-61	638	569	1	89.18	10.82	ME-SA	Iran-2001
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	569	0	89.05	10.95	ME-SA	Ind-2001a
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	569	0	89.05	10.95	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	563	0	88.11	11.89	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	563	0	88.11	11.89	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	562	0	87.95	12.05	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: O	Report date: 28/07/2010
WRLFMD Ref No: IRN/173/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00024	Checked by: V. Mioulet
Sender Ref: IR-89-145	
Location: Isolated RAZI, Iran	Topotype: ME-SA
Date collected: 01/01/2010	Genotype/strain: PanAsia-2
Date received by WRLFMD: 26/05/2010	Sequence filename: IRN10173.SEQ
Date received for sequencing: 11/06/2010	Date sequence last updated: 21/06/2010
Species: Not Known	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: 2234
O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 63 days
	Sequencing time: 47 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/11/2010	IRN10-11	639	637	0	99.69	0.31	ME-SA	PanAsia-2
2	O/IRN/2/2010	IRN10-02	639	637	0	99.69	0.31	ME-SA	PanAsia-2
3	O/IRN/12/2010	IRN10-12	639	636	0	99.53	0.47	ME-SA	PanAsia-2
4	O/IRN/30/2010	IRN10-30	639	636	0	99.53	0.47	ME-SA	PanAsia-2
5	O/IRN/4/2010	IRN10-04	639	636	0	99.53	0.47	ME-SA	PanAsia-2
6	O/PAK/3/2010	PAK10-03	639	636	0	99.53	0.47	ME-SA	PanAsia-2
7	O/PAK/4/2010	PAK10-04	639	636	0	99.53	0.47	ME-SA	PanAsia-2
8	O/IRN/100/2010	IRN10100	639	635	0	99.37	0.63	ME-SA	PanAsia-2
9	O/IRN/101/2010	IRN10101	639	635	0	99.37	0.63	ME-SA	PanAsia-2
10	O/IRN/142/2010	IRN10142	639	635	0	99.37	0.63	ME-SA	PanAsia-2
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/8/2005	IRN05-08	639	606	0	94.84	5.16	ME-SA	PanAsia-2
2	O/UKG/35/2001 (AJ539141)	UKG01-35	639	585	0	91.55	8.45	ME-SA	PanAsia
3	O/IRN/61/2001 (DQ164896)	IRN01-61	638	571	1	89.50	10.50	ME-SA	Iran-2001
4	O/OMN/7/2001 (DQ164941)	OMN01-07	639	571	0	89.36	10.64	ME-SA	Ind-2001b
5	O/KUW/3/97 (DQ164904)	KUW97-03	639	570	0	89.20	10.80	ME-SA	Ind-2001a
6	O/PAK/16/2003 (DQ165068)	PAK03-16	639	570	0	89.20	10.80	ME-SA	Pak-98
7	O/UAE/4/2008	UAE08-04	636	563	0	88.52	11.48	ME-SA	Ind-2001c
8	O/BHU/3/2009	BHU09-03	639	564	0	88.26	11.74	ME-SA	Ind-2001d
9	O/IND/53/79 (AF292107)	IND79A53	639	564	0	88.26	11.74	ME-SA	unnamed
10	O/IND/R2/75* (AF204276)	IND75--A	639	563	0	88.11	11.89	ME-SA	unnamed

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v3.1

© Institute for Animal Health

Report on FMDV O in Iran in 2010

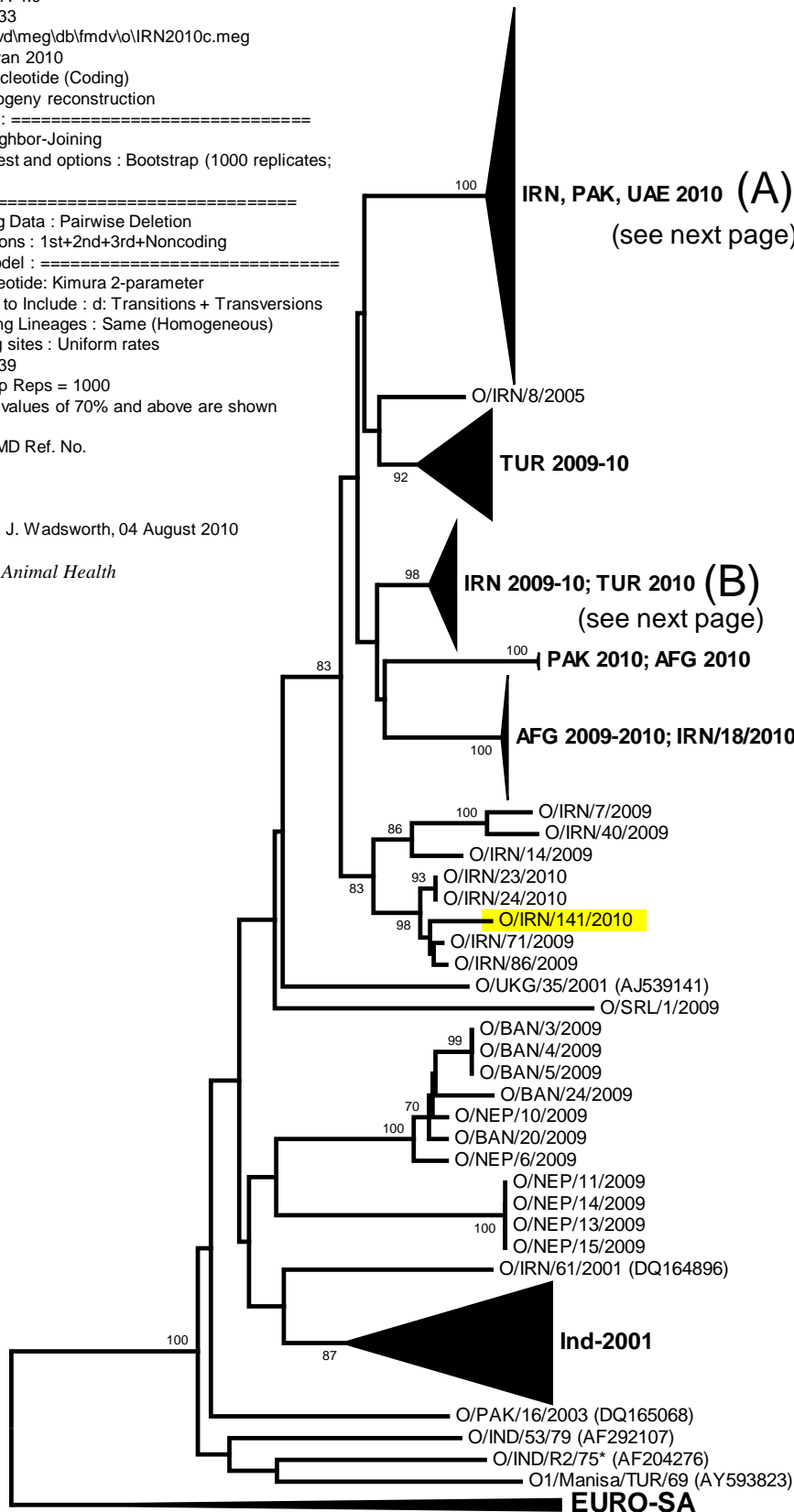
Batch: WRLFMD/2010/00024

Software: MEGA 4.0
No. of Taxa : 333
Data File : n:\evd\meg\db\fmdv\o\IRN2010c.meg
Data Title : O Iran 2010
Data Type : Nucleotide (Coding)
Analysis : Phylogeny reconstruction
Tree Inference : =====
->Method : Neighbor-Joining
->Phylogeny Test and options : Bootstrap (1000 replicates;
seed=60097)
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, 04 August 2010

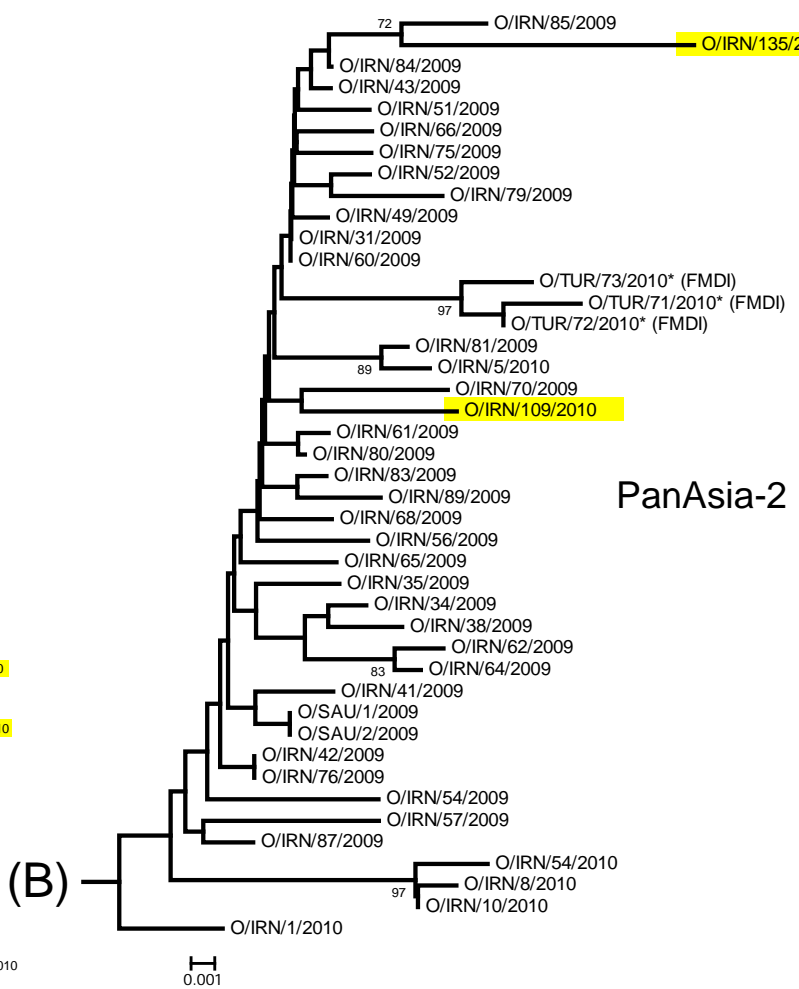
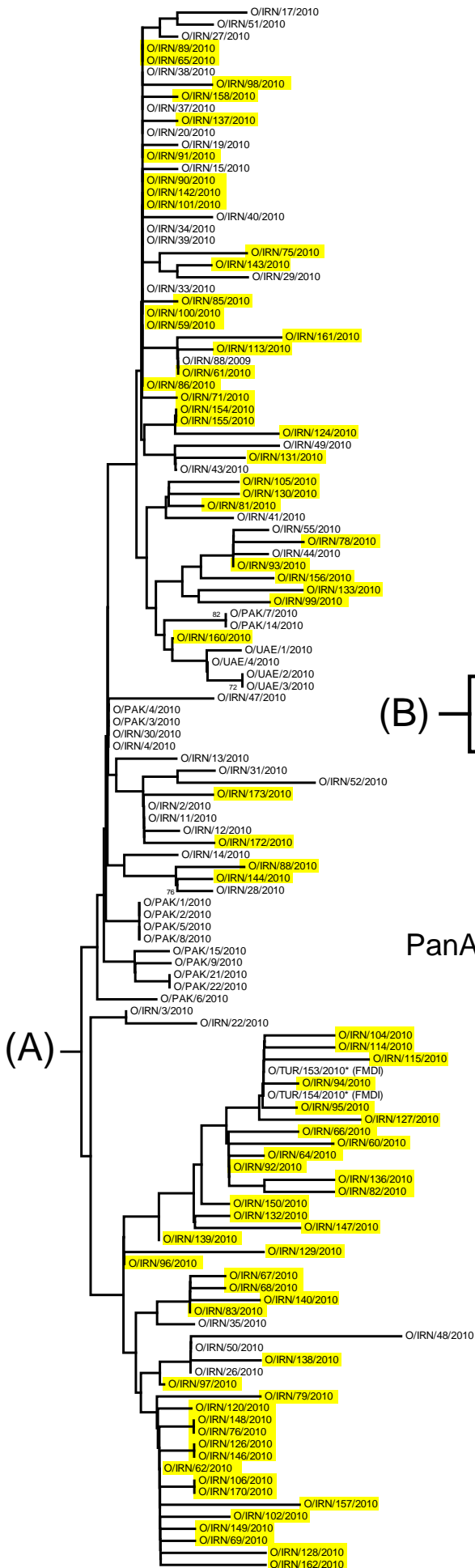
© Institute for Animal Health



PanAsia-2

ME-SA

0.02



PanAsia-2

PanAsia-2

Report on FMDV O in Iran in 2010
 Batch: WRLFMD/2010/00024
 (continued)