

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

Genotyping Report

Report Date for this Batch: 8 May 2014

FMDV type A

Country: Turkey

Period: 2013-2014

No. of samples: 15

BATCH: WRLFMD/2014/00012



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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/41/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0001	
Location: Yukari, Yaprakli, Cankiri, Turkey	Topotype: ASIA
Date collected: 31/12/2013	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR13-41.SEQ
Date received for sequencing: 28/04/2014	Date sequence last updated: 01/05/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 02/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/26/2014	TUR14-26	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/29/2014	TUR14-29	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/5/2014	TUR14-05	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/30/2014	TUR14-30	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	591	0	92.49	7.51	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	586	0	91.71	8.29	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	585	0	91.55	8.45	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	584	0	91.39	8.61	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	578	0	90.45	9.55	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A WRLFMD Ref No: TUR/1/2014 Batch No: WRLFMD/2014/00012 Sender Ref: 0005 Location: Kurtulus, Karakecili, Kirikkale, Turkey Date collected: 03/01/2014 Date received by WRLFMD: 21/03/2014 Date received for sequencing: 28/04/2014 Species: Cattle Material used: BTy1 03/04/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 03/05/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Iran-05 ^{SIS-10} Sequence filename: TUR14-01.SEQ Date sequence last updated: 01/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 1891 Min. no. of nt for comparison: 600 Total turn-around time: 43 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/16/2013	TUR13-16	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/18/2013	TUR13-18	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/19/2013	TUR13-19	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/21/2013	TUR13-21	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/22/2013	TUR13-22	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/23/2013	TUR13-23	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
7	A/Krasnodar/1/RUS/2013* (ARRIAH)	RUS13-AD	639	628	0	98.28	1.72	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/35/2013	TUR13-35	639	628	0	98.28	1.72	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/6/2012	TUR12-06	639	628	0	98.28	1.72	ASIA	Iran-05 ^{SIS-10}
10	A/KCR/1/RUS/2013* (ARRIAH)	RUS13-AB	639	627	0	98.12	1.88	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	617	0	96.56	3.44	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	601	0	94.05	5.95	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	595	0	93.11	6.89	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	592	0	92.64	7.36	ASIA	Iran-05 ^{BAR-08}
5	A/TUR/33/2008 (FJ755155)	TUR08-33	639	591	0	92.49	7.51	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/1/2005 (EF208769)	IRN05-01	639	590	0	92.33	7.67	ASIA	Iran-05
7	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	589	0	92.18	7.82	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	588	0	92.02	7.98	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/9/2010	IRN10-09	639	584	0	91.39	8.61	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

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

Page 1 of 1

Serotype: A WRLFMD Ref No: TUR/2/2014 Batch No: WRLFMD/2014/00012 Sender Ref: 0012 Location: Konakyeri, Pazaryolu, Erzurum, Turkey Date collected: 06/01/2014 Date received by WRLFMD: 21/03/2014 Date received for sequencing: 09/04/2014 Species: Cattle Material used: BTy1 03/04/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 03/05/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Iran-05 ^{SIS-10} Sequence filename: TUR14-02.SEQ Date sequence last updated: 16/04/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 1891 Min. no. of nt for comparison: 600 Total turn-around time: 43 days Sequencing time: 24 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/16/2013	TUR13-16	639	631	0	98.75	1.25	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/18/2013	TUR13-18	639	631	0	98.75	1.25	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/1204/2012* (FMDI)	TUR12-AA	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/19/2013	TUR13-19	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/21/2013	TUR13-21	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/22/2013	TUR13-22	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/23/2013	TUR13-23	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
8	A/IRQ/A222/2012* (FMDI)	IRQ12-AC	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
9	A/Krasnodar/1/RUS/2013* (ARRIAH)	RUS13-AD	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/30/2013	TUR13-30	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	618	0	96.71	3.29	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	602	0	94.21	5.79	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	600	0	93.90	6.10	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	596	0	93.27	6.73	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	590	0	92.33	7.67	ASIA	Iran-05 ^{HER-10}
6	A/TUR/1/2008 (FJ755133)	TUR08-01	639	590	0	92.33	7.67	ASIA	Iran-05 ^{ARD-07}
7	A/IRN/15/2012	IRN12-15	639	589	0	92.18	7.82	ASIA	Iran-05 ^{SIS-12}
8	A/TUR/33/2008 (FJ755155)	TUR08-33	639	589	0	92.18	7.82	ASIA	Iran-05 ^{EZM-07}
9	A/IRN/1/2005 (EF208769)	IRN05-01	639	588	0	92.02	7.98	ASIA	Iran-05
10	A/IRN/1/2011	IRN11-01	639	583	0	91.24	8.76	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/5/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0020	
Location: Kutu, Merkez, Amasya, Turkey	Topotype: ASIA
Date collected: 13/01/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-05.SEQ
Date received for sequencing: 09/04/2014	Date sequence last updated: 16/04/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 03/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 24 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/26/2014	TUR14-26	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/29/2014	TUR14-29	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/41/2013	TUR13-41	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/30/2014	TUR14-30	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	591	0	92.49	7.51	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	586	0	91.71	8.29	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	585	0	91.55	8.45	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	584	0	91.39	8.61	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	578	0	90.45	9.55	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/7/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0022	
Location: Gore, Merkez, Nevsehir, Turkey	Topotype: ASIA
Date collected: 14/01/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-07.SEQ
Date received for sequencing: 11/04/2014	Date sequence last updated: 22/04/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 04/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 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	A/TUR/1/2013	TUR13-01	639	617	0	96.56	3.44	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/11/2013	TUR13-11	639	617	0	96.56	3.44	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/10/2013	TUR13-10	639	616	0	96.40	3.60	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/7/2013	TUR13-07	639	616	0	96.40	3.60	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/35/2011	TUR11-35	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/5/2011	TUR11-05	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/10/2011	TUR11-10	639	613	0	95.93	4.07	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/13/2011	TUR11-13	639	613	0	95.93	4.07	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/14/2011	TUR11-14	639	613	0	95.93	4.07	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/16/2011	TUR11-16	639	613	0	95.93	4.07	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	611	0	95.62	4.38	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	600	0	93.90	6.10	ASIA	Iran-05 ^{AFG-07}
3	A/AFG/10/2010	AFG10-10	639	593	0	92.80	7.20	ASIA	Iran-05 ^{HER-10}
4	A/IRN/78/2009	IRN09-78	639	588	0	92.02	7.98	ASIA	Iran-05 ^{FAR-09}
5	A/BAR/6/2008 (FJ755010)	BAR08-06	639	586	0	91.71	8.29	ASIA	Iran-05 ^{BAR-08}
6	A/IRN/1/2005 (EF208769)	IRN05-01	639	586	0	91.71	8.29	ASIA	Iran-05
7	A/IRN/15/2012	IRN12-15	639	585	0	91.55	8.45	ASIA	Iran-05 ^{SIS-12}
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/TUR/33/2008 (FJ755155)	TUR08-33	639	583	0	91.24	8.76	ASIA	Iran-05 ^{EZM-07}
10	A/IRN/1/2011	IRN11-01	639	581	0	90.92	9.08	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/8/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0024	
Location: Sarpun, Arac, Kastamonu, Turkey	Topotype: ASIA
Date collected: 14/01/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-08.SEQ
Date received for sequencing: 11/04/2014	Date sequence last updated: 24/04/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 05/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 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	A/TUR/16/2013	TUR13-16	639	633	0	99.06	0.94	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/18/2013	TUR13-18	639	633	0	99.06	0.94	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/6/2012	TUR12-06	639	633	0	99.06	0.94	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/19/2013	TUR13-19	639	632	0	98.90	1.10	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/21/2013	TUR13-21	639	632	0	98.90	1.10	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/22/2013	TUR13-22	639	632	0	98.90	1.10	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/23/2013	TUR13-23	639	632	0	98.90	1.10	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/35/2013	TUR13-35	639	631	0	98.75	1.25	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/1204/2012* (FMDI)	TUR12-AA	639	630	0	98.59	1.41	ASIA	Iran-05 ^{SIS-10}
10	A/IRQ/A222/2012* (FMDI)	IRQ12-AC	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	620	0	97.03	2.97	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	600	0	93.90	6.10	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	596	0	93.27	6.73	ASIA	Iran-05 ^{BAR-08}
5	A/TUR/33/2008 (FJ755155)	TUR08-33	639	595	0	93.11	6.89	ASIA	Iran-05 ^{EZM-07}
6	A/AFG/10/2010	AFG10-10	639	594	0	92.96	7.04	ASIA	Iran-05 ^{HER-10}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	594	0	92.96	7.04	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	594	0	92.96	7.04	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	593	0	92.80	7.20	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	587	0	91.86	8.14	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A WRLFMD Ref No: TUR/12/2014 Batch No: WRLFMD/2014/00012 Sender Ref: 0067 Location: Yazlamazli, Duzici, Osmaniye, Turkey Date collected: 05/02/2014 Date received by WRLFMD: 21/03/2014 Date received for sequencing: 28/04/2014 Species: Cattle Material used: BTy1 09/04/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 03/05/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Iran-05 ^{SIS-10} Sequence filename: TUR14-12.SEQ Date sequence last updated: 01/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 1891 Min. no. of nt for comparison: 600 Total turn-around time: 43 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/21/2014	TUR14-21	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/26/2014	TUR14-26	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/29/2014	TUR14-29	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/41/2013	TUR13-41	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/5/2014	TUR14-05	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/30/2014	TUR14-30	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	591	0	92.49	7.51	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	586	0	91.71	8.29	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	585	0	91.55	8.45	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	584	0	91.39	8.61	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	578	0	90.45	9.55	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A WRLFMD Ref No: TUR/16/2014 Batch No: WRLFMD/2014/00012 Sender Ref: 0087 Location: Ekinyolu, Merkez, Bingol, Turkey Date collected: 10/02/2014 Date received by WRLFMD: 21/03/2014 Date received for sequencing: 28/04/2014 Species: Cattle Material used: BTy1 10/04/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 03/05/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Iran-05 ^{SIS-10} Sequence filename: TUR14-16.SEQ Date sequence last updated: 01/05/2014 No. of Nt determined: 627 No. of ambiguities: 0 Gene length: 627 Total no. of comparisons: 1874 Min. no. of nt for comparison: 600 Total turn-around time: 43 days Sequencing time: 5 days
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Comments: This virus has a 12 nt (4 aa) deletion in the β G- β H loop, immediately preceding the RGD integrin-binding motif.

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/Bingol/TUR/937/2013.442 (FMDI)	TUR13-AA	627	616	0	98.25	1.75	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/16/2013	TUR13-16	627	613	0	97.77	2.23	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/18/2013	TUR13-18	627	613	0	97.77	2.23	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/19/2013	TUR13-19	627	612	0	97.61	2.39	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/21/2013	TUR13-21	627	612	0	97.61	2.39	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/22/2013	TUR13-22	627	612	0	97.61	2.39	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/23/2013	TUR13-23	627	612	0	97.61	2.39	ASIA	Iran-05 ^{SIS-10}
8	A/Krasnodar/1/RUS/2013* (ARRIAH)	RUS13-AD	627	611	0	97.45	2.55	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/35/2013	TUR13-35	627	611	0	97.45	2.55	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/6/2012	TUR12-06	627	611	0	97.45	2.55	ASIA	Iran-05 ^{SIS-10}

Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	627	599	0	95.53	4.47	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	627	586	0	93.46	6.54	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	627	578	0	92.19	7.81	ASIA	Iran-05 ^{FAR-09}
4	A/TUR/33/2008 (FJ755155)	TUR08-33	627	577	0	92.03	7.97	ASIA	Iran-05 ^{EZM-07}
5	A/BAR/6/2008 (FJ755010)	BAR08-06	627	576	0	91.87	8.13	ASIA	Iran-05 ^{BAR-08}
6	A/IRN/1/2005 (EF208769)	IRN05-01	627	576	0	91.87	8.13	ASIA	Iran-05
7	A/TUR/1/2008 (FJ755133)	TUR08-01	627	575	0	91.71	8.29	ASIA	Iran-05 ^{ARD-07}
8	A/AFG/10/2010	AFG10-10	627	573	0	91.39	8.61	ASIA	Iran-05 ^{HER-10}
9	A/IRN/15/2012	IRN12-15	627	572	0	91.23	8.77	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/9/2010	IRN10-09	627	572	0	91.23	8.77	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/18/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0091	
Location: Omerbey, Merkez, Corum, Turkey	Topotype: ASIA
Date collected: 14/02/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-18.SEQ
Date received for sequencing: 28/04/2014	Date sequence last updated: 02/05/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy2 15/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/26/2014	TUR14-26	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/29/2014	TUR14-29	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/41/2013	TUR13-41	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/5/2014	TUR14-05	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/30/2014	TUR14-30	639	636	0	99.53	0.47	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	633	0	99.06	0.94	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	627	0	98.12	1.88	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	627	0	98.12	1.88	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	612	0	95.77	4.23	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	595	0	93.11	6.89	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	591	0	92.49	7.51	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	589	0	92.18	7.82	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	587	0	91.86	8.14	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	584	0	91.39	8.61	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	583	0	91.24	8.76	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	583	0	91.24	8.76	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	582	0	91.08	8.92	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	576	0	90.14	9.86	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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

Page 1 of 1

Serotype: A WRLFMD Ref No: TUR/19/2014 Batch No: WRLFMD/2014/00012 Sender Ref: 0109 Location: Kadirusagi, Yesilyurt, Malatya, Turkey Date collected: 21/02/2014 Date received by WRLFMD: 21/03/2014 Date received for sequencing: 28/04/2014 Species: Cattle Material used: BTy2 15/04/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 03/05/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Iran-05 ^{SIS-10} Sequence filename: TUR14-19.SEQ Date sequence last updated: 01/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 1891 Min. no. of nt for comparison: 600 Total turn-around time: 43 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/2/2014	TUR14-02	639	625	0	97.81	2.19	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/4/2013	TUR13-04	639	625	0	97.81	2.19	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/14/2013	TUR13-14	639	624	0	97.65	2.35	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/9/2013	TUR13-09	639	624	0	97.65	2.35	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/16/2013	TUR13-16	639	623	0	97.50	2.50	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/18/2013	TUR13-18	639	623	0	97.50	2.50	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/30/2013	TUR13-30	639	623	0	97.50	2.50	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/1204/2012* (FMDI)	TUR12-AA	639	622	0	97.34	2.66	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/19/2013	TUR13-19	639	622	0	97.34	2.66	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/21/2013	TUR13-21	639	622	0	97.34	2.66	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	615	0	96.24	3.76	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	603	0	94.37	5.63	ASIA	Iran-05 ^{AFG-07}
3	A/BAR/6/2008 (FJ755010)	BAR08-06	639	594	0	92.96	7.04	ASIA	Iran-05 ^{BAR-08}
4	A/AFG/10/2010	AFG10-10	639	593	0	92.80	7.20	ASIA	Iran-05 ^{HER-10}
5	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
6	A/TUR/1/2008 (FJ755133)	TUR08-01	639	589	0	92.18	7.82	ASIA	Iran-05 ^{ARD-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	587	0	91.86	8.14	ASIA	Iran-05
8	A/IRN/15/2012	IRN12-15	639	585	0	91.55	8.45	ASIA	Iran-05 ^{SIS-12}
9	A/TUR/33/2008 (FJ755155)	TUR08-33	639	585	0	91.55	8.45	ASIA	Iran-05 ^{EZM-07}
10	A/IRN/1/2011	IRN11-01	639	583	0	91.24	8.76	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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

Page 1 of 1

Serotype: A WRLFMD Ref No: TUR/21/2014 Batch No: WRLFMD/2014/00012 Sender Ref: 0113 Location: Ergenekon, Karakoyunlu, Igridir, Turkey Date collected: 24/02/2014 Date received by WRLFMD: 21/03/2014 Date received for sequencing: 28/04/2014 Species: Cattle Material used: BTy1 12/04/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 03/05/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Iran-05 ^{SIS-10} Sequence filename: TUR14-21.SEQ Date sequence last updated: 01/05/2014 No. of Nt determined: 639 No. of ambiguities: 0 Gene length: 639 Total no. of comparisons: 1891 Min. no. of nt for comparison: 600 Total turn-around time: 43 days Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/26/2014	TUR14-26	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/29/2014	TUR14-29	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/41/2013	TUR13-41	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/5/2014	TUR14-05	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/30/2014	TUR14-30	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	591	0	92.49	7.51	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	586	0	91.71	8.29	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	585	0	91.55	8.45	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	584	0	91.39	8.61	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	578	0	90.45	9.55	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/26/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0123	
Location: Merkez, Merkez, Sinop, Turkey	Topotype: ASIA
Date collected: 04/03/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-26.SEQ
Date received for sequencing: 28/04/2014	Date sequence last updated: 01/05/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 16/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/29/2014	TUR14-29	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/41/2013	TUR13-41	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/5/2014	TUR14-05	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/30/2014	TUR14-30	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	591	0	92.49	7.51	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	586	0	91.71	8.29	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	585	0	91.55	8.45	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	584	0	91.39	8.61	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	578	0	90.45	9.55	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/28/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0132	
Location: Merkez, Yalvac, Isparta, Turkey	Topotype: ASIA
Date collected: 09/03/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-28.SEQ
Date received for sequencing: 28/04/2014	Date sequence last updated: 01/05/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 16/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/26/2014	TUR14-26	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/29/2014	TUR14-29	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/41/2013	TUR13-41	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/5/2014	TUR14-05	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/30/2014	TUR14-30	639	634	0	99.22	0.78	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/18/2014	TUR14-18	639	633	0	99.06	0.94	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	625	0	97.81	2.19	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	625	0	97.81	2.19	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	610	0	95.46	4.54	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	593	0	92.80	7.20	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	589	0	92.18	7.82	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	587	0	91.86	8.14	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	585	0	91.55	8.45	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	584	0	91.39	8.61	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/15/2012	IRN12-15	639	582	0	91.08	8.92	ASIA	Iran-05 ^{SIS-12}
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	582	0	91.08	8.92	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/1/2005 (EF208769)	IRN05-01	639	581	0	90.92	9.08	ASIA	Iran-05
10	A/IRN/9/2010	IRN10-09	639	576	0	90.14	9.86	ASIA	Iran-05 ^{ESF-10}

nt, nucleotides

*, not a WRLFMD reference number

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/29/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0135	
Location: Kerisli, Bala, Ankara, Turkey	Topotype: ASIA
Date collected: 11/03/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-29.SEQ
Date received for sequencing: 28/04/2014	Date sequence last updated: 01/05/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 16/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 5 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/26/2014	TUR14-26	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/41/2013	TUR13-41	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/5/2014	TUR14-05	639	639	0	100.00	0.00	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/30/2014	TUR14-30	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	637	0	99.69	0.31	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	635	0	99.37	0.63	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	629	0	98.44	1.56	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	614	0	96.09	3.91	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	593	0	92.80	7.20	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	591	0	92.49	7.51	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	589	0	92.18	7.82	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	586	0	91.71	8.29	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	585	0	91.55	8.45	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	585	0	91.55	8.45	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	584	0	91.39	8.61	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	578	0	90.45	9.55	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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

Page 1 of 1

Serotype: A	Report date: 03/05/2014
WRLFMD Ref No: TUR/30/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00012	Checked by: K. Bachanek-Bankowska
Sender Ref: 0136	
Location: Golbasi, Seyhan, Adana, Turkey	Topotype: ASIA
Date collected: 12/03/2014	Genotype/strain: Iran-05 ^{SIS-10}
Date received by WRLFMD: 21/03/2014	Sequence filename: TUR14-30.SEQ
Date received for sequencing: 22/04/2014	Date sequence last updated: 01/05/2014
Species: Cattle	No. of Nt determined: 639
Material used: BTy1 16/04/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1891
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 43 days
	Sequencing time: 11 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TUR/12/2014	TUR14-12	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
2	A/TUR/21/2014	TUR14-21	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
3	A/TUR/26/2014	TUR14-26	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
4	A/TUR/29/2014	TUR14-29	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
5	A/TUR/41/2013	TUR13-41	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
6	A/TUR/5/2014	TUR14-05	639	638	0	99.84	0.16	ASIA	Iran-05 ^{SIS-10}
7	A/TUR/18/2014	TUR14-18	639	636	0	99.53	0.47	ASIA	Iran-05 ^{SIS-10}
8	A/TUR/28/2014	TUR14-28	639	634	0	99.22	0.78	ASIA	Iran-05 ^{SIS-10}
9	A/TUR/16/2013	TUR13-16	639	628	0	98.28	1.72	ASIA	Iran-05 ^{SIS-10}
10	A/TUR/18/2013	TUR13-18	639	628	0	98.28	1.72	ASIA	Iran-05 ^{SIS-10}
Most Closely Related Reference Viruses									
(see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/IRN/125/2010	IRN10125	639	613	0	95.93	4.07	ASIA	Iran-05 ^{SIS-10}
2	A/AFG/6/2007 (FJ755007)	AFG07-06	639	596	0	93.27	6.73	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/78/2009	IRN09-78	639	592	0	92.64	7.36	ASIA	Iran-05 ^{FAR-09}
4	A/BAR/6/2008 (FJ755010)	BAR08-06	639	590	0	92.33	7.67	ASIA	Iran-05 ^{BAR-08}
5	A/AFG/10/2010	AFG10-10	639	588	0	92.02	7.98	ASIA	Iran-05 ^{HER-10}
6	A/TUR/33/2008 (FJ755155)	TUR08-33	639	585	0	91.55	8.45	ASIA	Iran-05 ^{EZM-07}
7	A/IRN/1/2005 (EF208769)	IRN05-01	639	584	0	91.39	8.61	ASIA	Iran-05
8	A/TUR/1/2008 (FJ755133)	TUR08-01	639	584	0	91.39	8.61	ASIA	Iran-05 ^{ARD-07}
9	A/IRN/15/2012	IRN12-15	639	583	0	91.24	8.76	ASIA	Iran-05 ^{SIS-12}
10	A/IRN/1/2011	IRN11-01	639	577	0	90.30	9.70	ASIA	Iran-05 ^{FAR-11}

nt, nucleotides

*, not a WRLFMD reference number

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Report on FMDV A in Turkey in 2013-2014

Batch: WRLFMD/2014/00012

◆ indicates viruses in this batch

Software: MEGA 6.06

Analysis

Analysis ----- Phylogeny Reconstruction

Scope ----- All Selected Taxa

Statistical Method ----- Neighbor-joining

Phylogeny Test

Test of Phylogeny ----- Bootstrap method

No. of Bootstrap Replications ----- 1000

Substitution Model

Substitutions Type ----- Nucleotide

Model/Method ----- Kimura 2-parameter model

Substitutions to Include ----- d: Transitions + Transversions

Rates and Patterns

Rates among Sites ----- Uniform rates

Pattern among Lineages ----- Same (Homogeneous)

Data Subset to Use

Gaps/Missing Data Treatment ----- Pairwise deletion

Codons Included ----- 1st+2nd+3rd+Non-Coding

No. of Sites : 639

No Of Bootstrap Reps = 1000

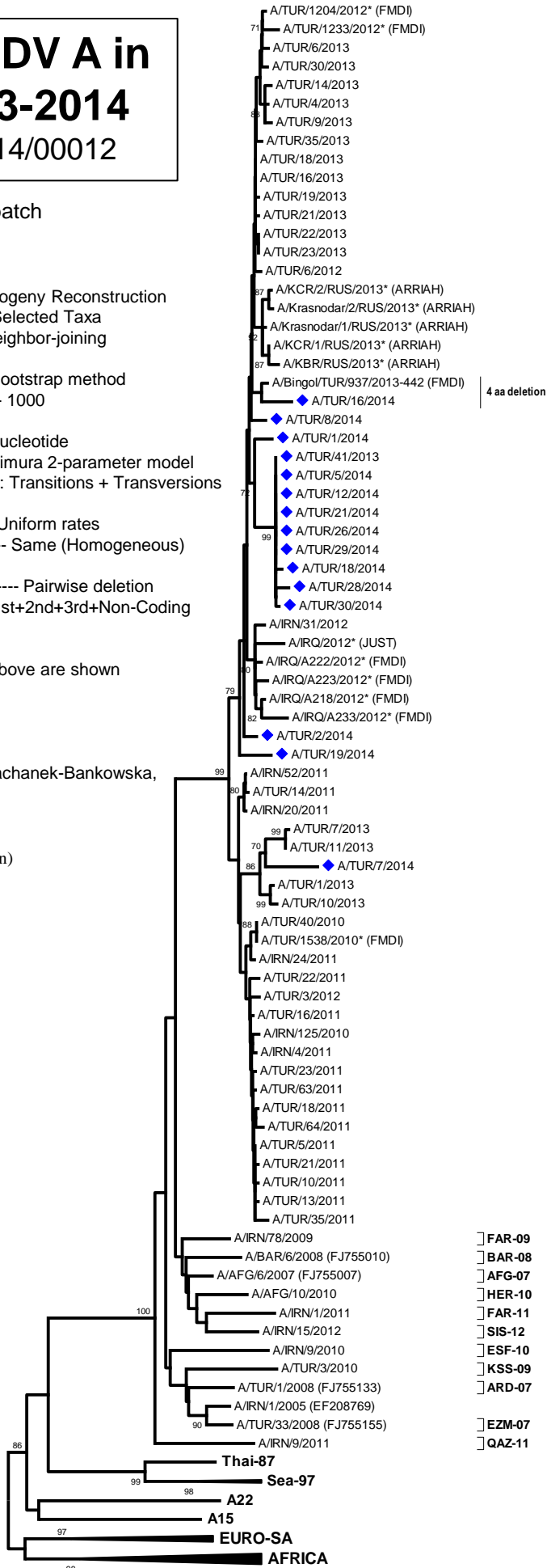
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Bachanek-Bankowska,
08 May 2014

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SIS-10

Iran-05

ASIA