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FMD Sequencing Report

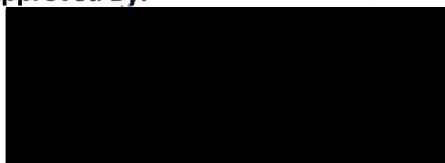
Lab Reference WRL Batch Number: WRLFMD/2010/00034
Sender Details: 
Date Received: 
Country of Origin: Iran
Date Reported: 29th November 2010

Dear Dr. Otarod,

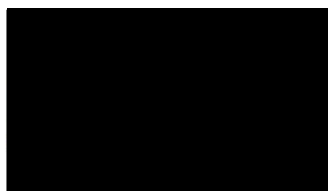
Re.: Serotype A

Sequencing work has now been completed in respect of the samples you submitted and the details are as attached. Please note that all of our phylogenetic trees can be accessed via the internet at: <http://www.wrlfmd.org/>

Results Approved By:



Official Stamp:



Date:

30.1.10



To help us improve the quality of our service, please send any suggestions or requests to the Reference Laboratory by fax (+44 (0) 1483 232621 or email: elizabeth.wilson@bbsrc.ac.uk)

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

Genotyping Report

Report Date for this Batch: 22 November 2010

FMDV type A

Country: Iran

Period: 2010

No. of isolates: 7

BATCH: WRLFMD/2010/00034



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FAO World Reference Laboratory for FMD Genotyping Report

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/195/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-179	
Location: Damshahr, Qom, Iran	Topotype: ASIA
Date collected: 29/07/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10195.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1178
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/PAK/37/2010	PAK10-37	639	635	0	99.37	0.63	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/125/2010	IRN10125	639	633	0	99.06	0.94	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/151/2010	IRN10151	639	631	0	98.75	1.25	ASIA	Iran-05 ^{AFG-07}
4	A/IRN/4/2008 (FJ755067)	IRN08-04	639	607	0	94.99	5.01	ASIA	Iran-05 ^{AFG-07}
5	A/AFG/44/2007	AFG07-44	639	606	0	94.84	5.16	ASIA	Iran-05 ^{AFG-07}
6	A/AFG/6/2007	AFG07-06	639	605	0	94.68	5.32	ASIA	Iran-05 ^{AFG-07}
7	A/PAK/5/2006	PAK06-05	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
8	A/PAK/5/2006 (EF494488)	PAK06-AC	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
9	A/BAR/2/2009	BAR09-02	639	602	0	94.21	5.79	ASIA	Iran-05 ^{AFG-07}
10	A/BAR/4/2009	BAR09-04	639	602	0	94.21	5.79	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	605	0	94.68	5.32	ASIA	Iran-05 ^{AFG-07}
2	A/BAR/6/2008	BAR08-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{BAR-08}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	595	0	93.11	6.89	ASIA	Iran-05
4	A/TUR/33/2008	TUR08-33	639	594	0	92.96	7.04	ASIA	Iran-05 ^{EZM-07}
5	A/TUR/1/2008	TUR08-01	639	593	0	92.80	7.20	ASIA	Iran-05 ^{ARD-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	536	0	84.28	15.72	ASIA	Iran-99
7	A/IRN/2/87 (EF208770)	IRN87-02	636	535	0	84.12	15.88	ASIA	Iran-87
8	A/TAI/118/87* (EF208777)	TAI87-AD	636	526	0	82.70	17.30	ASIA	Thai-87
9	A/IRN/1/96 (EF208771)	IRN96-01	638	526	1	82.45	17.55	ASIA	Iran-96
10	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	639	526	0	82.32	17.68	ASIA	A ₁₅

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/197/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-177	
Location: Kerman, Iran	Topotype: ASIA
Date collected: 08/08/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10197.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1178
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/IRN/185/2010	IRN10185	639	638	0	99.84	0.16	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/188/2010	IRN10188	639	638	0	99.84	0.16	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/177/2010	IRN10177	639	637	0	99.69	0.31	ASIA	Iran-05 ^{AFG-07}
4	A/AFG/11/2009	AFG09-11	639	621	0	97.18	2.82	ASIA	Iran-05 ^{AFG-07}
5	A/AFG/9/2009	AFG09-09	639	621	0	97.18	2.82	ASIA	Iran-05 ^{AFG-07}
6	A/AFG/44/2007	AFG07-44	639	618	0	96.71	3.29	ASIA	Iran-05 ^{AFG-07}
7	A/IRN/15/2009	IRN09-15	639	618	0	96.71	3.29	ASIA	Iran-05 ^{AFG-07}
8	A/IRN/26/2009	IRN09-26	639	618	0	96.71	3.29	ASIA	Iran-05 ^{AFG-07}
9	A/IRN/53/2009	IRN09-53	639	618	0	96.71	3.29	ASIA	Iran-05 ^{AFG-07}
10	A/IRN/9/2009	IRN09-09	639	618	0	96.71	3.29	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/1/2005 (EF208769)	IRN05-01	639	604	0	94.52	5.48	ASIA	Iran-05
3	A/BAR/6/2008	BAR08-06	639	603	0	94.37	5.63	ASIA	Iran-05 ^{BAR-08}
4	A/TUR/1/2008	TUR08-01	639	595	0	93.11	6.89	ASIA	Iran-05 ^{ARD-07}
5	A/TUR/33/2008	TUR08-33	639	592	0	92.64	7.36	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	537	0	84.43	15.57	ASIA	Iran-99
7	A/TAI/118/87* (EF208777)	TAI87-AD	636	534	0	83.96	16.04	ASIA	Thai-87
8	A/IRN/2/87 (EF208770)	IRN87-02	636	530	0	83.33	16.67	ASIA	Iran-87
9	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	639	530	0	82.94	17.06	ASIA	A ₁₅
10	A/TAI/2/97 (EF208778)	TAI97-02	636	525	0	82.55	17.45	ASIA	Thai-97

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/200/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-168	
Location: Qom, Iran	Topotype: ASIA
Date collected: 23/08/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10200.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1178
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/IRN/185/2010	IRN10185	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/188/2010	IRN10188	639	637	0	99.69	0.31	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/177/2010	IRN10177	639	636	0	99.53	0.47	ASIA	Iran-05 ^{AFG-07}
4	A/AFG/11/2009	AFG09-11	639	620	0	97.03	2.97	ASIA	Iran-05 ^{AFG-07}
5	A/AFG/9/2009	AFG09-09	639	620	0	97.03	2.97	ASIA	Iran-05 ^{AFG-07}
6	A/AFG/44/2007	AFG07-44	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
7	A/IRN/15/2009	IRN09-15	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
8	A/IRN/26/2009	IRN09-26	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
9	A/IRN/53/2009	IRN09-53	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
10	A/IRN/9/2009	IRN09-09	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	616	0	96.40	3.60	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/1/2005 (EF208769)	IRN05-01	639	603	0	94.37	5.63	ASIA	Iran-05
3	A/BAR/6/2008	BAR08-06	639	602	0	94.21	5.79	ASIA	Iran-05 ^{BAR-08}
4	A/TUR/1/2008	TUR08-01	639	594	0	92.96	7.04	ASIA	Iran-05 ^{ARD-07}
5	A/TUR/33/2008	TUR08-33	639	591	0	92.49	7.51	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	538	0	84.59	15.41	ASIA	Iran-99
7	A/TAI/118/87* (EF208777)	TAI87-AD	636	533	0	83.81	16.19	ASIA	Thai-87
8	A/IRN/2/87 (EF208770)	IRN87-02	636	529	0	83.18	16.82	ASIA	Iran-87
9	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	639	529	0	82.79	17.21	ASIA	A ₁₅
10	A/TAI/2/97 (EF208778)	TAI97-02	636	524	0	82.39	17.61	ASIA	Thai-97

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/201/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-168	
Location: Qom, Iran	Topotype: ASIA
Date collected: 23/08/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10201.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1178
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/IRN/185/2010	IRN10185	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/188/2010	IRN10188	639	637	0	99.69	0.31	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/177/2010	IRN10177	639	636	0	99.53	0.47	ASIA	Iran-05 ^{AFG-07}
4	A/AFG/11/2009	AFG09-11	639	620	0	97.03	2.97	ASIA	Iran-05 ^{AFG-07}
5	A/AFG/9/2009	AFG09-09	639	620	0	97.03	2.97	ASIA	Iran-05 ^{AFG-07}
6	A/AFG/44/2007	AFG07-44	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
7	A/IRN/15/2009	IRN09-15	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
8	A/IRN/26/2009	IRN09-26	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
9	A/IRN/53/2009	IRN09-53	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
10	A/IRN/9/2009	IRN09-09	639	617	0	96.56	3.44	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	616	0	96.40	3.60	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/1/2005 (EF208769)	IRN05-01	639	603	0	94.37	5.63	ASIA	Iran-05
3	A/BAR/6/2008	BAR08-06	639	602	0	94.21	5.79	ASIA	Iran-05 ^{BAR-08}
4	A/TUR/1/2008	TUR08-01	639	594	0	92.96	7.04	ASIA	Iran-05 ^{ARD-07}
5	A/TUR/33/2008	TUR08-33	639	591	0	92.49	7.51	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	538	0	84.59	15.41	ASIA	Iran-99
7	A/TAI/118/87* (EF208777)	TAI87-AD	636	533	0	83.81	16.19	ASIA	Thai-87
8	A/IRN/2/87 (EF208770)	IRN87-02	636	529	0	83.18	16.82	ASIA	Iran-87
9	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	639	529	0	82.79	17.21	ASIA	A ₁₅
10	A/TAI/2/97 (EF208778)	TAI97-02	636	524	0	82.39	17.61	ASIA	Thai-97

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/212/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-173	
Location: Damshahr, Qom, Iran	Topotype: ASIA
Date collected: 05/10/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10212.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1184
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/IRN/213/2010	IRN10213	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/214/2010	IRN10214	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/125/2010	IRN10125	639	629	0	98.44	1.56	ASIA	Iran-05 ^{AFG-07}
4	A/IRN/151/2010	IRN10151	639	627	0	98.12	1.88	ASIA	Iran-05 ^{AFG-07}
5	A/PAK/37/2010	PAK10-37	639	627	0	98.12	1.88	ASIA	Iran-05 ^{AFG-07}
6	A/IRN/195/2010	IRN10195	639	623	0	97.50	2.50	ASIA	Iran-05 ^{AFG-07}
7	A/IRN/4/2008 (FJ755067)	IRN08-04	639	607	0	94.99	5.01	ASIA	Iran-05 ^{AFG-07}
8	A/AFG/44/2007	AFG07-44	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
9	A/PAK/5/2006	PAK06-05	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
10	A/PAK/5/2006 (EF494488)	PAK06-AC	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	603	0	94.37	5.63	ASIA	Iran-05 ^{AFG-07}
2	A/BAR/6/2008	BAR08-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{BAR-08}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	595	0	93.11	6.89	ASIA	Iran-05
4	A/TUR/1/2008	TUR08-01	639	593	0	92.80	7.20	ASIA	Iran-05 ^{ARD-07}
5	A/TUR/33/2008	TUR08-33	639	590	0	92.33	7.67	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	540	0	84.91	15.09	ASIA	Iran-99
7	A/IRN/2/87 (EF208770)	IRN87-02	636	532	0	83.65	16.35	ASIA	Iran-87
8	A/TAI/118/87* (EF208777)	TAI87-AD	636	530	0	83.33	16.67	ASIA	Thai-87
9	A/IRN/1/96 (EF208771)	IRN96-01	638	526	1	82.45	17.55	ASIA	Iran-96
10	A22/IRQ/64 (AY593763)	IRQ64--A	639	524	0	82.00	18.00	ASIA	A ₂₂

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/213/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-174	
Location: Damshahr, Qom, Iran	Topotype: ASIA
Date collected: 05/10/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10213.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1184
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/IRN/212/2010	IRN10212	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/214/2010	IRN10214	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/125/2010	IRN10125	639	629	0	98.44	1.56	ASIA	Iran-05 ^{AFG-07}
4	A/IRN/151/2010	IRN10151	639	627	0	98.12	1.88	ASIA	Iran-05 ^{AFG-07}
5	A/PAK/37/2010	PAK10-37	639	627	0	98.12	1.88	ASIA	Iran-05 ^{AFG-07}
6	A/IRN/195/2010	IRN10195	639	623	0	97.50	2.50	ASIA	Iran-05 ^{AFG-07}
7	A/IRN/4/2008 (FJ755067)	IRN08-04	639	607	0	94.99	5.01	ASIA	Iran-05 ^{AFG-07}
8	A/AFG/44/2007	AFG07-44	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
9	A/PAK/5/2006	PAK06-05	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
10	A/PAK/5/2006 (EF494488)	PAK06-AC	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	603	0	94.37	5.63	ASIA	Iran-05 ^{AFG-07}
2	A/BAR/6/2008	BAR08-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{BAR-08}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	595	0	93.11	6.89	ASIA	Iran-05
4	A/TUR/1/2008	TUR08-01	639	593	0	92.80	7.20	ASIA	Iran-05 ^{ARD-07}
5	A/TUR/33/2008	TUR08-33	639	590	0	92.33	7.67	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	540	0	84.91	15.09	ASIA	Iran-99
7	A/IRN/2/87 (EF208770)	IRN87-02	636	532	0	83.65	16.35	ASIA	Iran-87
8	A/TAI/118/87* (EF208777)	TAI87-AD	636	530	0	83.33	16.67	ASIA	Thai-87
9	A/IRN/1/96 (EF208771)	IRN96-01	638	526	1	82.45	17.55	ASIA	Iran-96
10	A22/IRQ/64 (AY593763)	IRQ64--A	639	524	0	82.00	18.00	ASIA	A ₂₂

nt, nucleotides

*, not a WRLFMD reference number

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Serotype: A	Report date: 22/11/2010
WRLFMD Ref No: IRN/214/2010	Reported by: N.J. Knowles
Batch No: WRLFMD/2010/00034	Checked by: D.P. King
Sender Ref: IR-89-181	
Location: Damshahr, Qom, Iran	Topotype: ASIA
Date collected: 05/10/2010	Genotype/strain: Iran-05 ^{AFG-07}
Date received by WRLFMD: 25/10/2010	Sequence filename: IRN10214.SEQ
Date received for sequencing: 12/11/2010	Date sequence last updated: 22/11/2010
Species: Cattle	No. of Nt determined: 639
Material used: BTy1	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 639
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1184
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 28 days
	Sequencing time: 10 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/IRN/212/2010	IRN10212	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
2	A/IRN/213/2010	IRN10213	639	639	0	100.00	0.00	ASIA	Iran-05 ^{AFG-07}
3	A/IRN/125/2010	IRN10125	639	629	0	98.44	1.56	ASIA	Iran-05 ^{AFG-07}
4	A/IRN/151/2010	IRN10151	639	627	0	98.12	1.88	ASIA	Iran-05 ^{AFG-07}
5	A/PAK/37/2010	PAK10-37	639	627	0	98.12	1.88	ASIA	Iran-05 ^{AFG-07}
6	A/IRN/195/2010	IRN10195	639	623	0	97.50	2.50	ASIA	Iran-05 ^{AFG-07}
7	A/IRN/4/2008 (FJ755067)	IRN08-04	639	607	0	94.99	5.01	ASIA	Iran-05 ^{AFG-07}
8	A/AFG/44/2007	AFG07-44	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
9	A/PAK/5/2006	PAK06-05	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
10	A/PAK/5/2006 (EF494488)	PAK06-AC	639	604	0	94.52	5.48	ASIA	Iran-05 ^{AFG-07}
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/AFG/6/2007	AFG07-06	639	603	0	94.37	5.63	ASIA	Iran-05 ^{AFG-07}
2	A/BAR/6/2008	BAR08-06	639	597	0	93.43	6.57	ASIA	Iran-05 ^{BAR-08}
3	A/IRN/1/2005 (EF208769)	IRN05-01	639	595	0	93.11	6.89	ASIA	Iran-05
4	A/TUR/1/2008	TUR08-01	639	593	0	92.80	7.20	ASIA	Iran-05 ^{ARD-07}
5	A/TUR/33/2008	TUR08-33	639	590	0	92.33	7.67	ASIA	Iran-05 ^{EZM-07}
6	A/IRN/22/99 (EF208772)	IRN99-22	636	540	0	84.91	15.09	ASIA	Iran-99
7	A/IRN/2/87 (EF208770)	IRN87-02	636	532	0	83.65	16.35	ASIA	Iran-87
8	A/TAI/118/87* (EF208777)	TAI87-AD	636	530	0	83.33	16.67	ASIA	Thai-87
9	A/IRN/1/96 (EF208771)	IRN96-01	638	526	1	82.45	17.55	ASIA	Iran-96
10	A22/IRQ/64 (AY593763)	IRQ64--A	639	524	0	82.00	18.00	ASIA	A ₂₂

nt, nucleotides

*, not a WRLFMD reference number

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Report on FMDV A in Iran in 2010

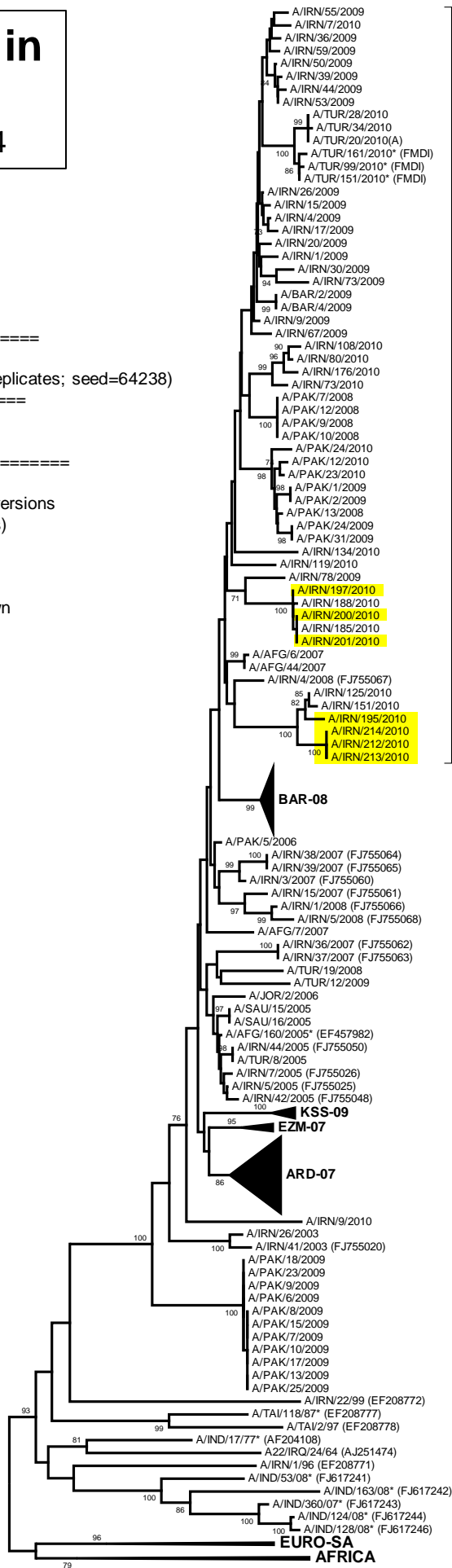
Batch: WRLFMD/2010/00034

Software: MEGA 4.0
 No. of Taxa : 208
 Data File : n:\evd\meg\db\fmv\la\IRN2010e.meg
 Data Title : A Iran 2010
 Data Type : Nucleotide (Coding)
 Analysis : Phylogeny reconstruction
 Tree Inference : =====
 ->Method : Neighbor-Joining
 ->Phylogeny Test and options : Bootstrap (1000 replicates; seed=64238)
 Include Sites : =====
 ->Gaps/Missing Data : Pairwise Deletion
 ->Codon Positions : 1st+2nd+3rd+Noncoding
 Substitution Model : =====
 ->Model : Nucleotide: Kimura 2-parameter
 ->Substitutions to Include : d: Transitions + Transversions
 ->Pattern among Lineages : Same (Homogeneous)
 ->Rates among sites : Uniform rates
 No. of Sites : 639
 No Of Bootstrap Reps = 1000
 Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 22 November 2010

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AFG-07

Iran-05

ASIA

0.02