

Serotype: A	Report date: 29/07/2008
WRL Ref No: IRN/1/2008	Reported by: N.J. Knowles
Sender Ref: IR-1 675-1	Checked by: D.J. Paton
Date collected: 2008	
Date received by WRLFMD: 23/04/2008	Topotype: ASIA
Date received for sequencing: 29/04/2008	Genotype/strain: Irn-05
Species: Not known	Sequence filename: IRN08-01.SEQ
Material used: BTy1	Date sequence last updated: 08/07/2008
Region sequenced: VP1	Total no. of comparisons: 938
RT-PCR primers: A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 300
No. of Nt determined: 639	Total turn-around time: 97 days
No. of ambiguities: 0	Sequencing time: 91 days
Gene length: 639	

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/5/2008	IRN08-05	639	632	0	98.9	1.1
2	A/IRN/15/2007	IRN07-15	639	624	0	97.65	2.35
3	A/PAK/5/2006	PAK06-05	639	619	0	96.87	3.13
4	A/IRN/3/2007	IRN07-03	639	618	0	96.71	3.29
5	A/AFG/160/2005* (EF457982)	AFG05-AA	639	615	0	96.24	3.76
6	A/AFG/44/2007	AFG07-44	639	615	0	96.24	3.76
7	A/IRN/22/2005	IRN05-22	639	615	0	96.24	3.76
8	A/IRN/27/2005	IRN05-27	639	615	0	96.24	3.76
9	A/IRN/5/2006	IRN06-05	639	615	0	96.24	3.76
10	A/SAU/15/2005	SAU05-15	639	615	0	96.24	3.76

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/1/2005 (EF208769)	IRN05-01	639	611	0	95.62	4.38
2	A/SAU/41/91	SAU91-41	636	545	0	85.69	14.31
3	A/IRN/2/87 (EF208770)	IRN87-02	636	543	0	85.38	14.62
4	A/TAI/118/87* (EF208777)	TAI87-AD	636	541	0	85.06	14.94
5	A/IRN/22/99 (EF208772)	IRN99-22	636	535	0	84.12	15.88
6	A/SAU/23/86 (EU414536)	SAU86-23	639	533	0	83.41	16.59
7	A/TAI/2/97 (EF208778)	TAI97-02	636	530	0	83.33	16.67
8	A/IRN/1/96 (EF208771)	IRN96-01	638	531	1	83.23	16.77
9	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	527	0	82.47	17.53
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	510	0	79.81	20.19

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: A	Report date: 29/07/2008
WRL Ref No: IRN/4/2008	Reported by: N.J. Knowles
Sender Ref: IR-4 692-4	Checked by: D.J. Paton
Date collected: 2008	
Date received by WRLFMD: 23/04/2008	Topotype: ASIA
Date received for sequencing: 29/04/2008	Genotype/strain: Irn-05
Species: Not known	Sequence filename: IRN08-04.SEQ
Material used: BTy1	Date sequence last updated: 08/07/2008
Region sequenced: VP1	Total no. of comparisons: 938
RT-PCR primers: A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 300
No. of Nt determined: 639	Total turn-around time: 97 days
No. of ambiguities: 0	Sequencing time: 91 days
Gene length: 639	

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/AFG/44/2007	AFG07-44	639	628	0	98.28	1.72
2	A/AFG/6/2007	AFG07-06	639	627	0	98.12	1.88
3	A/PAK/5/2006	PAK06-05	639	620	0	97.03	2.97
4	A/IRN/3/2007	IRN07-03	639	615	0	96.24	3.76
5	A/IRN/28/2005	IRN05-28	639	614	0	96.09	3.91
6	A/AFG/160/2005* (EF457982)	AFG05-AA	639	613	0	95.93	4.07
7	A/Elazig/TUR/548/05* (Lindholm)	TUR05-AG	639	613	0	95.93	4.07
8	A/IRN/10/2005	IRN05-10	639	613	0	95.93	4.07
9	A/IRN/13/2005	IRN05-13	639	613	0	95.93	4.07
10	A/IRN/16/2005	IRN05-16	639	613	0	95.93	4.07

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/1/2005 (EF208769)	IRN05-01	639	609	0	95.31	4.69
2	A/SAU/41/91	SAU91-41	636	538	0	84.59	15.41
3	A/IRN/22/99 (EF208772)	IRN99-22	636	537	0	84.43	15.57
4	A/IRN/2/87 (EF208770)	IRN87-02	636	535	0	84.12	15.88
5	A/TAI/118/87* (EF208777)	TAI87-AD	636	534	0	83.96	16.04
6	A/SAU/23/86 (EU414536)	SAU86-23	639	528	0	82.63	17.37
7	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	528	0	82.63	17.37
8	A/TAI/2/97 (EF208778)	TAI97-02	636	525	0	82.55	17.45
9	A/IRN/1/96 (EF208771)	IRN96-01	638	526	1	82.45	17.55
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	515	0	80.59	19.41

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: A	Report date: 29/07/2008
WRL Ref No: IRN/5/2008	Reported by: N.J. Knowles
Sender Ref: IR-5 781-5	Checked by: D.J. Paton
Date collected: 2008	Topotype: ASIA
Date received by WRLFMD: 23/04/2008	Genotype/strain: Irn-05
Date received for sequencing: 29/04/2008	Sequence filename: IRN08-05.SEQ
Species: Not known	Date sequence last updated: 08/07/2008
Material used: BTy1	Total no. of comparisons: 938
Region sequenced: VP1	Min. no. of nt for comparison: 300
RT-PCR primers: A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R	Total turn-around time: 97 days
No. of Nt determined: 639	Sequencing time: 91 days
No. of ambiguities: 0	
Gene length: 639	

Comments:

#### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/1/2008	IRN08-01	639	632	0	98.9	1.1
2	A/IRN/15/2007	IRN07-15	639	621	0	97.18	2.82
3	A/PAK/5/2006	PAK06-05	639	616	0	96.4	3.6
4	A/IRN/3/2007	IRN07-03	639	615	0	96.24	3.76
5	A/AFG/160/2005* (EF457982)	AFG05-AA	639	612	0	95.77	4.23
6	A/AFG/44/2007	AFG07-44	639	612	0	95.77	4.23
7	A/IRN/22/2005	IRN05-22	639	612	0	95.77	4.23
8	A/IRN/27/2005	IRN05-27	639	612	0	95.77	4.23
9	A/IRN/5/2006	IRN06-05	639	612	0	95.77	4.23
10	A/SAU/15/2005	SAU05-15	639	612	0	95.77	4.23

#### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IRN/1/2005 (EF208769)	IRN05-01	639	608	0	95.15	4.85
2	A/SAU/41/91	SAU91-41	636	543	0	85.38	14.62
3	A/IRN/2/87 (EF208770)	IRN87-02	636	537	0	84.43	15.57
4	A/TAI/118/87* (EF208777)	TAI87-AD	636	537	0	84.43	15.57
5	A/IRN/22/99 (EF208772)	IRN99-22	636	536	0	84.28	15.72
6	A/IRN/1/96 (EF208771)	IRN96-01	638	531	1	83.23	16.77
7	A/SAU/23/86 (EU414536)	SAU86-23	639	531	0	83.1	16.9
8	A/TAI/2/97 (EF208778)	TAI97-02	636	528	0	83.02	16.98
9	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	522	0	81.69	18.31
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	506	0	79.19	20.81

nt, nucleotides

\*, not a WRLFMD reference number

# Report on FMDV A from Iran in 2008

(only the A-Iran-05 lineage is shown)

Software: MEGA 4.0  
 No. of Taxa : 156  
 Data File : n:\levd\meg\db\fmdv\alrN2008a.meg  
 Data Title : A Iran 2008  
 Data Type : Nucleotide (Coding)  
 Analysis : Phylogeny reconstruction  
 Tree Inference : =====  
 ->Method : Neighbor-Joining  
 ->Phylogeny Test and options : Bootstrap (1000 replicates; seed=56677)  
 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 : 645  
 No Of Bootstrap Reps = 1000  
 Only bootstrap values of 70% and above are shown

\*, not a WRLFMD Ref. No.

N.J. Knowles, K. Ebert & J. Wadsworth, 29 July 2008

