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|--|--|
| Serotype: A                              | Report date: 10/12/2008                |
| WRL Ref No: BAR/6/2008                   | Reported by: N.J. Knowles              |
| Sender Ref: none                         | Checked by: D.P. King                  |
| Date collected: 24/11/2008               |  |
| Date received by WRLFMD: 27/11/2008      | Topotype: ASIA                         |
| Date received for sequencing: 04/12/2008 | Genotype/strain: Irn-05                |
| Species: Cattle                          | Sequence filename: BAR08-06.SEQ        |
| Material used: BTy1                      | Date sequence last updated: 10/12/2008 |
| Region sequenced: VP1                    | Total no. of comparisons: 975          |
| RT-PCR primers: A-1C562F/EUR-2B52R;      | Min. no. of nt for comparison: 300     |
| A-1C612F/EUR-2B52R                       | Total turn-around time: 13 days        |
| No. of Nt determined: 639                | Sequencing time: 6 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/BAR/7/2008               | BAR08-07 | 639             | 638            | 0                  | 99.84      | 0.16         |
| 2    | A/PAK/5/2006               | PAK06-05 | 639             | 618            | 0                  | 96.71      | 3.29         |
| 3    | A/AFG/44/2007              | AFG07-44 | 639             | 616            | 0                  | 96.4       | 3.6          |
| 4    | A/AFG/6/2007               | AFG07-06 | 639             | 615            | 0                  | 96.24      | 3.76         |
| 5    | A/AFG/160/2005* (EF457982) | AFG05-AA | 639             | 613            | 0                  | 95.93      | 4.07         |
| 6    | A/IRN/4/2008               | IRN08-04 | 639             | 612            | 0                  | 95.77      | 4.23         |
| 7    | A/IRN/22/2005              | IRN05-22 | 639             | 611            | 0                  | 95.62      | 4.38         |
| 8    | A/IRN/27/2005              | IRN05-27 | 639             | 611            | 0                  | 95.62      | 4.38         |
| 9    | A/IRN/3/2007               | IRN07-03 | 639             | 611            | 0                  | 95.62      | 4.38         |
| 10   | A/IRN/5/2005               | IRN05-05 | 639             | 611            | 0                  | 95.62      | 4.38         |

#### 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             | 541            | 0                  | 85.06      | 14.94        |
| 3    | A/TAI/118/87* (EF208777)       | TAI87-AD | 636             | 536            | 0                  | 84.28      | 15.72        |
| 4    | A/IRN/2/87 (EF208770)          | IRN87-02 | 636             | 534            | 0                  | 83.96      | 16.04        |
| 5    | A/IRN/1/96 (EF208771)          | IRN96-01 | 638             | 533            | 1                  | 83.54      | 16.46        |
| 6    | A/IRN/22/99 (EF208772)         | IRN99-22 | 636             | 530            | 0                  | 83.33      | 16.67        |
| 7    | A/SAU/23/86 (EU414536)         | SAU86-23 | 639             | 529            | 0                  | 82.79      | 17.21        |
| 8    | A/TAI/2/97 (EF208778)          | TAI97-02 | 636             | 525            | 0                  | 82.55      | 17.45        |
| 9    | A22/IRQ/24/64 (AJ251474)       | IRQ64-24 | 639             | 524            | 0                  | 82         | 18           |
| 10   | A24/Cruzeiro/BRA/55 (AJ251476) | BRA55--C | 639             | 513            | 0                  | 80.28      | 19.72        |

nt, nucleotides

\*, not a WRLFMD reference number

|  |  |
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| Serotype: A                              | Report date: 10/12/2008                |
| WRL Ref No: BAR/7/2008                   | Reported by: N.J. Knowles              |
| Sender Ref: none                         | Checked by: D.P. King                  |
| Date collected: 24/11/2008               |  |
| Date received by WRLFMD: 27/11/2008      | Topotype: ASIA                         |
| Date received for sequencing: 04/12/2008 | Genotype/strain: Irn-05                |
| Species: Cattle                          | Sequence filename: BAR08-07.SEQ        |
| Material used: BTy1                      | Date sequence last updated: 10/12/2008 |
| Region sequenced: VP1                    | Total no. of comparisons: 975          |
| RT-PCR primers: A-1C562F/EUR-2B52R;      | Min. no. of nt for comparison: 300     |
| A-1C612F/EUR-2B52R                       | Total turn-around time: 13 days        |
| No. of Nt determined: 639                | Sequencing time: 6 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/BAR/6/2008               | BAR08-06 | 639             | 638            | 0                  | 99.84      | 0.16         |
| 2    | A/PAK/5/2006               | PAK06-05 | 639             | 617            | 0                  | 96.56      | 3.44         |
| 3    | A/AFG/44/2007              | AFG07-44 | 639             | 615            | 0                  | 96.24      | 3.76         |
| 4    | A/AFG/6/2007               | AFG07-06 | 639             | 614            | 0                  | 96.09      | 3.91         |
| 5    | A/AFG/160/2005* (EF457982) | AFG05-AA | 639             | 612            | 0                  | 95.77      | 4.23         |
| 6    | A/IRN/4/2008               | IRN08-04 | 639             | 611            | 0                  | 95.62      | 4.38         |
| 7    | A/IRN/22/2005              | IRN05-22 | 639             | 610            | 0                  | 95.46      | 4.54         |
| 8    | A/IRN/27/2005              | IRN05-27 | 639             | 610            | 0                  | 95.46      | 4.54         |
| 9    | A/IRN/3/2007               | IRN07-03 | 639             | 610            | 0                  | 95.46      | 4.54         |
| 10   | A/IRN/5/2005               | IRN05-05 | 639             | 610            | 0                  | 95.46      | 4.54         |

#### 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             | 540            | 0                  | 84.91      | 15.09        |
| 3    | A/TAI/118/87* (EF208777)       | TAI87-AD | 636             | 535            | 0                  | 84.12      | 15.88        |
| 4    | A/IRN/2/87 (EF208770)          | IRN87-02 | 636             | 533            | 0                  | 83.81      | 16.19        |
| 5    | A/IRN/1/96 (EF208771)          | IRN96-01 | 638             | 532            | 1                  | 83.39      | 16.61        |
| 6    | A/IRN/22/99 (EF208772)         | IRN99-22 | 636             | 529            | 0                  | 83.18      | 16.82        |
| 7    | A/SAU/23/86 (EU414536)         | SAU86-23 | 639             | 528            | 0                  | 82.63      | 17.37        |
| 8    | A/TAI/2/97 (EF208778)          | TAI97-02 | 636             | 524            | 0                  | 82.39      | 17.61        |
| 9    | A22/IRQ/24/64 (AJ251474)       | IRQ64-24 | 639             | 523            | 0                  | 81.85      | 18.15        |
| 10   | A24/Cruzeiro/BRA/55 (AJ251476) | BRA55--C | 639             | 512            | 0                  | 80.13      | 19.87        |

nt, nucleotides

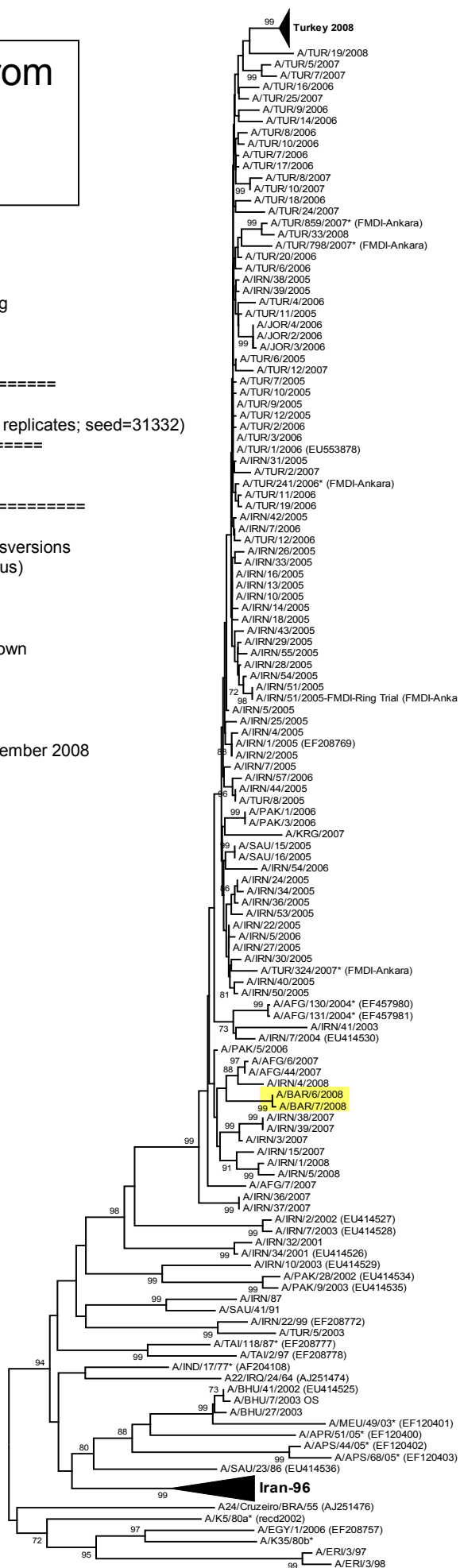
\*, not a WRLFMD reference number

# Report on FMDV A from Bahrain in 2008

Batch: WRLFMD/2008/00033

Software: MEGA 4.0  
 No. of Taxa : 174  
 Data File : n:\evd\meg\db\fmdv\al\BAR2008a.meg  
 Data Title : Bahrain 2008  
 Data Type : Nucleotide (Coding)  
 Analysis : Phylogeny reconstruction  
 Tree Inference : =====  
 ->Method : Neighbor-Joining  
 ->Phylogeny Test and options : Bootstrap (1000 replicates; seed=31332)  
 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, 10 December 2008



Iran-05

ASIA

EURO-SA

AFRICA