

Serotype: A Report date: 05/06/2006
 WRL Ref No: PAK/1/2006
 Sender Ref: 1.1
 Date collected: 31/01/2006 Topotype: Asia
 Date received by WRLFMD: 28/04/2006 Genotype/strain: none designated
 Date received for sequencing: 05/05/2006 Sequence filename: PAK06-01.SEQ
 Species: Cattle Date sequence last updated: 16/05/2006
 Material used: BTy1 Total no. of comparisons: 889
 Region sequenced: VP1 Min. no. of nt for comparison: 300
 RT-PCR primers: A-1C562F/EUR-2B52R; Total turn-around time: 38 days
 A-1C612F/EUR-2B52R Sequencing time: 31 days
 No. of Nt determined: 639
 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/PAK/3/2006	PAK06-03	639	639	0	100	0
2	A/IRN/27/2005	IRN05-27	639	628	0	98.28	1.72
3	A/IRN/1/2005	IRN05-01	639	628	0	98.28	1.72
4	A/IRN/2/2005	IRN05-02	639	628	0	98.28	1.72
5	A/IRN/5/2005	IRN05-05	639	628	0	98.28	1.72
6	A/IRN/22/2005	IRN05-22	639	628	0	98.28	1.72
7	A/IRN/25/2005	IRN05-25	639	628	0	98.28	1.72
8	A/TUR/3/2006	TUR06-03	639	627	0	98.12	1.88
9	A/IRN/7/2005	IRN05-07	639	627	0	98.12	1.88
10	A/TUR/1/2006	TUR06-01	638	626	1	98.12	1.88

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/SAU/41/91	SAU91-41	636	541	0	85.06	14.94
2	A/IND/7/82 (1980)	IND82-07	639	538	0	84.19	15.81
3	A/IRN/87	IRN87--M	634	532	2	83.91	16.09
4	A/IRN/22/99	IRN99-22	636	530	0	83.33	16.67
5	A/TAI/118/87*	TAI87-AD	636	527	0	82.86	17.14
6	A/SAU/23/86	SAU86-23	639	529	0	82.79	17.21
7	A/IRN/1/96	IRN96-01	638	525	1	82.29	17.71
8	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	524	0	82	18
9	A/TAI/2/97	TAI97-02	636	520	0	81.76	18.24
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	506	0	79.19	20.81

nt, nucleotides
 *, not a WRLFMD reference number

Serotype: A	Report date: 05/06/2006
WRL Ref No: PAK/3/2006	
Sender Ref: 1.3	
Date collected: 31/01/2006	
Date received by WRLFMD: 28/04/2006	Topotype: Asia
Date received for sequencing: 05/05/2006	Genotype/strain: none designated
Species: Cattle	Sequence filename: PAK06-03.SEQ
Material used: BTy1	Date sequence last updated: 16/05/2006
Region sequenced: VP1	Total no. of comparisons: 889
RT-PCR primers: A-1C562F/EUR-2B52R;	Min. no. of nt for comparison: 300
A-1C612F/EUR-2B52R	Total turn-around time: 38 days
No. of Nt determined: 639	Sequencing time: 31 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/PAK/1/2006	PAK06-01	639	639	0	100	0
2	A/IRN/27/2005	IRN05-27	639	628	0	98.28	1.72
3	A/IRN/1/2005	IRN05-01	639	628	0	98.28	1.72
4	A/IRN/2/2005	IRN05-02	639	628	0	98.28	1.72
5	A/IRN/5/2005	IRN05-05	639	628	0	98.28	1.72
6	A/IRN/22/2005	IRN05-22	639	628	0	98.28	1.72
7	A/IRN/25/2005	IRN05-25	639	628	0	98.28	1.72
8	A/TUR/3/2006	TUR06-03	639	627	0	98.12	1.88
9	A/IRN/7/2005	IRN05-07	639	627	0	98.12	1.88
10	A/TUR/1/2006	TUR06-01	638	626	1	98.12	1.88

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/SAU/41/91	SAU91-41	636	541	0	85.06	14.94
2	A/IND/7/82 (1980)	IND82-07	639	538	0	84.19	15.81
3	A/IRN/87	IRN87--M	634	532	2	83.91	16.09
4	A/IRN/22/99	IRN99-22	636	530	0	83.33	16.67
5	A/TAI/118/87*	TAI87-AD	636	527	0	82.86	17.14
6	A/SAU/23/86	SAU86-23	639	529	0	82.79	17.21
7	A/IRN/1/96	IRN96-01	638	525	1	82.29	17.71
8	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	524	0	82	18
9	A/TAI/2/97	TAI97-02	636	520	0	81.76	18.24
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	506	0	79.19	20.81

nt, nucleotides
 *, not a WRLFMD reference number

Serotype: A Report date: 05/06/2006
WRL Ref No: PAK/5/2006
Sender Ref: 3.3
Date collected: 31/01/2006
Date received by WRLFMD: 28/04/2006 Topotype: Asia
Date received for sequencing: 05/05/2006 Genotype/strain: none designated
Species: Cattle Sequence filename: PAK06-05.SEQ
Material used: BTy1 Date sequence last updated: 16/05/2006
Region sequenced: VP1 Total no. of comparisons: 889
RT-PCR primers: A-1C562F/EUR-2B52R; Min. no. of nt for comparison: 300
A-1C612F/EUR-2B52R Total turn-around time: 38 days
No. of Nt determined: 639 Sequencing time: 31 days
No. of ambiguities: 0
Gene length: 639

Comments:

Ten Most Closely Related Viruses

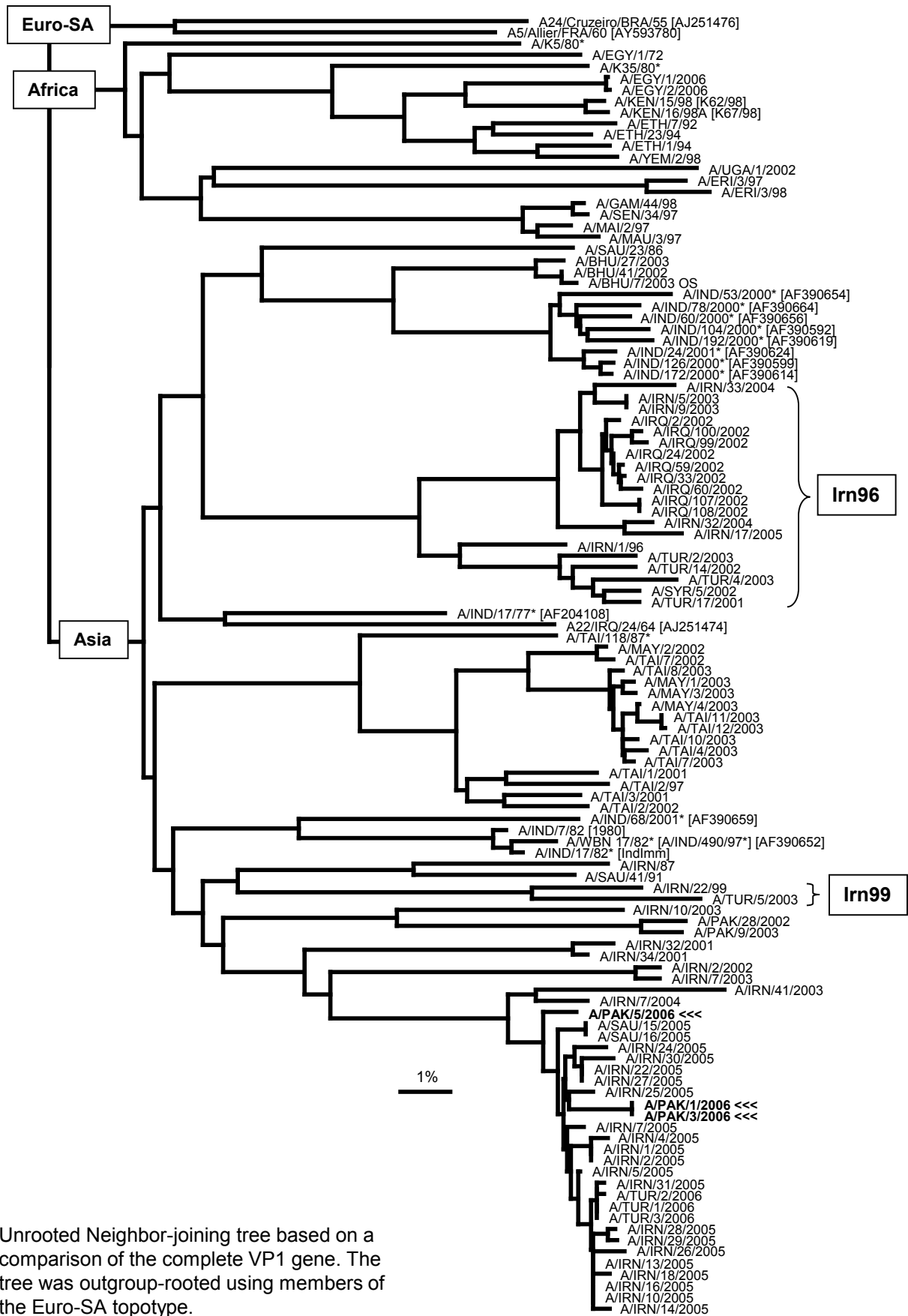
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/SAU/16/2005	SAU05-16	639	630	0	98.59	1.41
2	A/SAU/15/2005	SAU05-15	639	630	0	98.59	1.41
3	A/IRN/5/2005	IRN05-05	639	630	0	98.59	1.41
4	A/IRN/22/2005	IRN05-22	639	630	0	98.59	1.41
5	A/IRN/27/2005	IRN05-27	639	630	0	98.59	1.41
6	A/IRN/7/2005	IRN05-07	639	629	0	98.44	1.56
7	A/IRN/1/2005	IRN05-01	639	628	0	98.28	1.72
8	A/IRN/10/2005	IRN05-10	639	628	0	98.28	1.72
9	A/IRN/13/2005	IRN05-13	639	628	0	98.28	1.72
10	A/IRN/16/2005	IRN05-16	639	628	0	98.28	1.72

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/IND/7/82 (1980)	IND82-07	639	546	0	85.45	14.55
2	A/SAU/41/91	SAU91-41	636	543	0	85.38	14.62
3	A/IRN/87	IRN87--M	634	536	2	84.54	15.46
4	A/IRN/22/99	IRN99-22	636	537	0	84.43	15.57
5	A/TAI/118/87*	TAI87-AD	636	536	0	84.28	15.72
6	A/SAU/23/86	SAU86-23	639	533	0	83.41	16.59
7	A/IRN/1/96	IRN96-01	638	532	1	83.39	16.61
8	A/TAI/2/97	TAI97-02	636	529	0	83.18	16.82
9	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	527	0	82.47	17.53
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	514	0	80.44	19.56

nt, nucleotides
*, not a WRLFMD reference number

Report on FMDV A from Pakistan in 2006



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using members of the Euro-SA topospecies.