

Serotype: A  
WRL Ref No: SUD/1/2006  
Sender Ref: FMARF/FMD Sud-3  
Date collected: 09/11/2006  
Date received by WRLFMD: 10/04/2007  
Date received for sequencing: 20/04/2007  
Species: Cattle  
Material used: BTy2  
Region sequenced: VP1  
RT-PCR primers: A-1C562F/EUR-2B52R;  
A-1C612F/EUR-2B52R  
No. of Nt determined: 639  
No. of ambiguities: 0  
Gene length: 639

Report date: 10/05/2007  
Topotype: AFRICA  
Genotype/strain: none designated  
Sequence filename: SUD06-01.SEQ  
Date sequence last updated: 03/05/2007  
Total no. of comparisons: 846  
Min. no. of nt for comparison: 300  
Total turn-around time: 30 days  
Sequencing time: 20 days

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/SUD/3/2006	SUD06-03	639	625	0	97.81	2.19
2	A/CAR/12/2000	CAR00-12	639	577	0	90.3	9.7
3	A/CAR/13/2000	CAR00-13	639	577	0	90.3	9.7
4	A/CAR/14/2000	CAR00-14	639	577	0	90.3	9.7
5	A/CAR/15/2000 (EF208755)	CAR00-15	639	577	0	90.3	9.7
6	A/CAR/P19/2000 (mfa/057/01)	CRC00-01	639	577	0	90.3	9.7
7	A/ERI/3/97	ERI97-03	639	571	0	89.36	10.64
8	A/CAR/P22/2000 (fke/066/08)	CRC00-02	639	570	0	89.2	10.8
9	A/ERI/2/98	ERI98-02	639	568	0	88.89	11.11
10	A/ERI/3/98	ERI98-03	639	568	0	88.89	11.11

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	510	0	79.81	20.19
2	A/IRN/22/99 (EF208772)	IRN99-22	636	505	0	79.4	20.6
3	A/IND/7/82 (1980)	IND82-07	639	500	0	78.25	21.75
4	A/IRN/87	IRN87--M	634	496	2	78.23	21.77
5	A/SAU/41/91	SAU91-41	636	497	0	78.14	21.86
6	A/TAI/2/97 (EF208778)	TAI97-02	636	496	0	77.99	22.01
7	A/IRN/1/96 (EF208771)	IRN96-01	638	496	1	77.74	22.26
8	A/TAI/118/87* (EF208777)	TAI87-AD	636	494	0	77.67	22.33
9	A/SAU/23/86	SAU86-23	639	494	0	77.31	22.69
10	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	494	0	77.31	22.69

nt, nucleotides

\*, not a WRLFMD reference number

Serotype: A  
WRL Ref No: SUD/3/2006  
Sender Ref: Sud-5  
Date collected: 26/11/2006  
Date received by WRLFMD: 10/04/2007  
Date received for sequencing: 20/04/2007  
Species: Cattle  
Material used: BTy2  
Region sequenced: VP1  
RT-PCR primers: A-1C562F/EUR-2B52R;  
A-1C612F/EUR-2B52R  
No. of Nt determined: 639  
No. of ambiguities: 0  
Gene length: 639

Report date: 10/05/2007  
Topotype: AFRICA  
Genotype/strain: none designated  
Sequence filename: SUD06-03.SEQ  
Date sequence last updated: 03/05/2007  
Total no. of comparisons: 846  
Min. no. of nt for comparison: 300  
Total turn-around time: 30 days  
Sequencing time: 20 days

Comments:

### Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/SUD/1/2006	SUD06-01	639	625	0	97.81	2.19
2	A/CAR/12/2000	CAR00-12	639	583	0	91.24	8.76
3	A/CAR/13/2000	CAR00-13	639	583	0	91.24	8.76
4	A/CAR/14/2000	CAR00-14	639	583	0	91.24	8.76
5	A/CAR/15/2000 (EF208755)	CAR00-15	639	583	0	91.24	8.76
6	A/CAR/P19/2000 (mfa/057/01)	CRC00-01	639	583	0	91.24	8.76
7	A/ERI/3/97	ERI97-03	639	574	0	89.83	10.17
8	A/CAR/P22/2000 (fke/066/08)	CRC00-02	639	571	0	89.36	10.64
9	A/ERI/2/98	ERI98-02	639	571	0	89.36	10.64
10	A/ERI/3/98	ERI98-03	639	571	0	89.36	10.64

### Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	639	511	0	79.97	20.03
2	A/IRN/22/99 (EF208772)	IRN99-22	636	506	0	79.56	20.44
3	A/SAU/41/91	SAU91-41	636	500	0	78.62	21.38
4	A/IRN/1/96 (EF208771)	IRN96-01	638	500	1	78.37	21.63
5	A/IND/7/82 (1980)	IND82-07	639	500	0	78.25	21.75
6	A22/IRQ/24/64 (AJ251474)	IRQ64-24	639	500	0	78.25	21.75
7	A/IRN/87	IRN87--M	634	496	2	78.23	21.77
8	A/TAI/2/97 (EF208778)	TAI97-02	636	497	0	78.14	21.86
9	A/TAI/118/87* (EF208777)	TAI87-AD	636	495	0	77.83	22.17
10	A/SAU/23/86	SAU86-23	639	497	0	77.78	22.22

nt, nucleotides

\*, not a WRLFMD reference number

# Report on FMDV A in Sudan in 2006

Software: MEGA 3.1

No. of Taxa : 116

Data File : n:\levd\meg\db\fmdv\A\SUD2006A.meg

Data Title : SUD / ETH / EGY

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: p-distance

Substitutions to Include : d: Transitions + Transversions

Pattern among Lineages : Same (Homogeneous)

Rates among sites : Uniform rates

No. of Sites : 642

No Of Bootstrap Reps = 1000

N.J. Knowles & J. Wadsworth, 10 May 2007

