

Serotype: O	Report date: 26/11/2004
WRL Ref No: TAN/1/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: EA-2
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-01.SEQ
RT-PCR primers: O-1C272F/NK61	Date sequence last updated: 24/11/2004
No. of Nt determined: 639	Total no. of comparisons: 1540
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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	O/KEN/18/98 (K82/98)	KEN98-18	384	362	17	94.27	5.73
2	O/ZAM/2/2000	ZAM00-02	639	593	0	92.8	7.2
3	O/BUN/2/2003	BUN03-02	450	417	1	92.67	7.33
4	O/ZAM/1/2000	ZAM00-01	639	591	0	92.49	7.51
5	UG 5/02/O (OVI)	UGA02-AA	489	450	1	92.02	7.98
6	O/UGA/3/2002	UGA02-03	638	587	1	92.01	7.99
7	UG 11/02/O (OVI)	UGA02-AB	495	455	0	91.92	8.08
8	O/UGA/8/2004	UGA04-08	639	587	0	91.86	8.14
9	O/UGA/5/2004	UGA04-05	639	587	0	91.86	8.14
10	O/UGA/7/2004	UGA04-07	639	587	0	91.86	8.14

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	207	178	3	85.99	14.01
2	O/IND/R2/75*	IND75--A	639	544	0	85.13	14.87
3	O/TAW/2/99	TAW99-02	639	543	0	84.98	15.02
4	O/IND/53/79	IND79A53	639	542	0	84.82	15.18
5	O1/Manisa/TUR/69	TUR69--E	639	539	0	84.35	15.65
6	O/ISR/2/88	ISR88-02	639	539	0	84.35	15.65
7	O/TAI/189/87*	TAI87-AC	639	521	0	81.53	18.47
8	O1/BFS 1860/UK/67	UKG67--A	639	520	0	81.38	18.62
9	O/HKN/6/83	HKN83-06	637	515	2	80.85	19.15
10	O/PHI/5/95	PHI95-05	639	509	0	79.66	20.34

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 26/11/2004
WRL Ref No: TAN/2/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: EA-2
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-02.SEQ
RT-PCR primers: O-1C272F/NK61	Date sequence last updated: 25/11/2004
No. of Nt determined: 639	Total no. of comparisons: 1540
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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	O/TAN/3/2004	TAN04-03	639	639	0	100	0
2	O/TAN/12/2004	TAN04-12	639	635	0	99.37	0.63
3	O/BUN/7/2003	BUN03-07	639	601	0	94.05	5.95
4	O/KEN/18/98 (K82/98)	KEN98-18	384	361	17	94.01	5.99
5	O/BUN/6/2003	BUN03A06	628	590	0	93.95	6.05
6	O/BUN/3/2003	BUN03A03	634	595	4	93.85	6.15
7	O/BUN/2/2003	BUN03-02	450	417	1	92.67	7.33
8	O/KEN/5/2002	KEN02-05	639	587	0	91.86	8.14
9	UG 5/02/O (OVI)	UGA02-AA	489	447	1	91.41	8.59
10	UG 11/02/O (OVI)	UGA02-AB	495	452	0	91.31	8.69

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	207	178	3	85.99	14.01
2	O/ISR/2/88	ISR88-02	639	541	0	84.66	15.34
3	O/IND/53/79	IND79A53	639	539	0	84.35	15.65
4	O/TAW/2/99	TAW99-02	639	537	0	84.04	15.96
5	O/IND/R2/75*	IND75--A	639	536	0	83.88	16.12
6	O1/Manisa/TUR/69	TUR69--E	639	530	0	82.94	17.06
7	O/TAI/189/87*	TAI87-AC	639	517	0	80.91	19.09
8	O1/BFS 1860/UK/67	UKG67--A	639	514	0	80.44	19.56
9	O/PHI/5/95	PHI95-05	639	507	0	79.34	20.66
10	O/HKN/6/83	HKN83-06	637	504	2	79.12	20.88

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 26/11/2004
WRL Ref No: TAN/3/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: EA-2
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-03.SEQ
RT-PCR primers: O-1C272F/NK61	Date sequence last updated: 25/11/2004
No. of Nt determined: 639	Total no. of comparisons: 1540
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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	O/TAN/2/2004	TAN04-02	639	639	0	100	0
2	O/TAN/12/2004	TAN04-12	639	635	0	99.37	0.63
3	O/BUN/7/2003	BUN03-07	639	601	0	94.05	5.95
4	O/KEN/18/98 (K82/98)	KEN98-18	384	361	17	94.01	5.99
5	O/BUN/6/2003	BUN03A06	628	590	0	93.95	6.05
6	O/BUN/3/2003	BUN03A03	634	595	4	93.85	6.15
7	O/BUN/2/2003	BUN03-02	450	417	1	92.67	7.33
8	O/KEN/5/2002	KEN02-05	639	587	0	91.86	8.14
9	UG 5/02/O (OVI)	UGA02-AA	489	447	1	91.41	8.59
10	UG 11/02/O (OVI)	UGA02-AB	495	452	0	91.31	8.69

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	207	178	3	85.99	14.01
2	O/ISR/2/88	ISR88-02	639	541	0	84.66	15.34
3	O/IND/53/79	IND79A53	639	539	0	84.35	15.65
4	O/TAW/2/99	TAW99-02	639	537	0	84.04	15.96
5	O/IND/R2/75*	IND75--A	639	536	0	83.88	16.12
6	O1/Manisa/TUR/69	TUR69--E	639	530	0	82.94	17.06
7	O/TAI/189/87*	TAI87-AC	639	517	0	80.91	19.09
8	O1/BFS 1860/UK/67	UKG67--A	639	514	0	80.44	19.56
9	O/PHI/5/95	PHI95-05	639	507	0	79.34	20.66
10	O/HKN/6/83	HKN83-06	637	504	2	79.12	20.88

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 26/11/2004
WRL Ref No: TAN/12/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: EA-2
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-12.SEQ
RT-PCR primers: O-1C272F/NK61	Date sequence last updated: 25/11/2004
No. of Nt determined: 639	Total no. of comparisons: 1540
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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	O/TAN/2/2004	TAN04-02	639	635	0	99.37	0.63
2	O/TAN/3/2004	TAN04-03	639	635	0	99.37	0.63
3	O/BUN/7/2003	BUN03-07	639	601	0	94.05	5.95
4	O/BUN/6/2003	BUN03A06	628	590	0	93.95	6.05
5	O/BUN/3/2003	BUN03A03	634	595	4	93.85	6.15
6	O/KEN/18/98 (K82/98)	KEN98-18	384	360	17	93.75	6.25
7	O/BUN/2/2003	BUN03-02	450	418	1	92.89	7.11
8	O/KEN/5/2002	KEN02-05	639	587	0	91.86	8.14
9	UG 5/02/O (OVI)	UGA02-AA	489	447	1	91.41	8.59
10	UG 11/02/O (OVI)	UGA02-AB	495	452	0	91.31	8.69

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	207	178	3	85.99	14.01
2	O/ISR/2/88	ISR88-02	639	538	0	84.19	15.81
3	O/IND/53/79	IND79A53	639	538	0	84.19	15.81
4	O/TAW/2/99	TAW99-02	639	536	0	83.88	16.12
5	O/IND/R2/75*	IND75--A	639	535	0	83.72	16.28
6	O1/Manisa/TUR/69	TUR69--E	639	529	0	82.79	17.21
7	O/TAI/189/87*	TAI87-AC	639	516	0	80.75	19.25
8	O1/BFS 1860/UK/67	UKG67--A	639	515	0	80.59	19.41
9	O/PHI/5/95	PHI95-05	639	506	0	79.19	20.81
10	O/HKN/6/83	HKN83-06	637	503	2	78.96	21.04

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 26/11/2004
WRL Ref No: TAN/14/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: EA-2
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-14.SEQ
RT-PCR primers: O-1C272F/NK61	Date sequence last updated: 24/11/2004
No. of Nt determined: 639	Total no. of comparisons: 1540
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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	O/TAN/17/2004	TAN04-17	639	639	0	100	0
2	O/RWA/2/2004	RWA04-02	639	635	0	99.37	0.63
3	O/RWA/3/2004	RWA04-03	639	635	0	99.37	0.63
4	O/RWA/2/98	RWA98-02	637	604	2	94.82	5.18
5	O/BUN/3/99	BUN99-03	639	599	0	93.74	6.26
6	O/TAN/1/85	TAN85-01	639	570	0	89.2	10.8
7	O/KEN/18/98 (K82/98)	KEN98-18	384	342	17	89.06	10.94
8	O/ZAM/1/2000	ZAM00-01	639	567	0	88.73	11.27
9	O/ZAM/2/2000	ZAM00-02	639	567	0	88.73	11.27
10	O/TAN/9/98	TAN98-09	639	567	0	88.73	11.27

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	207	177	3	85.51	14.49
2	O/ISR/2/88	ISR88-02	639	546	0	85.45	14.55
3	O/IND/53/79	IND79A53	639	542	0	84.82	15.18
4	O1/Manisa/TUR/69	TUR69--E	639	541	0	84.66	15.34
5	O/TAW/2/99	TAW99-02	639	540	0	84.51	15.49
6	O/IND/R2/75*	IND75--A	639	538	0	84.19	15.81
7	O/TAI/189/87*	TAI87-AC	639	526	0	82.32	17.68
8	O/PHI/5/95	PHI95-05	639	512	0	80.13	19.87
9	O/HKN/6/83	HKN83-06	637	507	2	79.59	20.41
10	O1/BFS 1860/UK/67	UKG67--A	639	503	0	78.72	21.28

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 26/11/2004
WRL Ref No: TAN/17/2004	
Date collected: not known	
Date received: 15/11/2004	
Species: Bovine	Topotype: EA-2
Material used: IRPI2 RS1	Genotype/strain: none designated
Region sequenced: VP1	Sequence filename: TAN04-17.SEQ
RT-PCR primers: O-1C272F/NK61	Date sequence last updated: 25/11/2004
No. of Nt determined: 639	Total no. of comparisons: 1540
No. of ambiguities: 0	Min. no. of nt for comparison: 300
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	O/TAN/14/2004	TAN04-14	639	639	0	100	0
2	O/RWA/2/2004	RWA04-02	639	635	0	99.37	0.63
3	O/RWA/3/2004	RWA04-03	639	635	0	99.37	0.63
4	O/RWA/2/98	RWA98-02	637	604	2	94.82	5.18
5	O/BUN/3/99	BUN99-03	639	599	0	93.74	6.26
6	O/TAN/1/85	TAN85-01	639	570	0	89.2	10.8
7	O/KEN/18/98 (K82/98)	KEN98-18	384	342	17	89.06	10.94
8	O/ZAM/1/2000	ZAM00-01	639	567	0	88.73	11.27
9	O/ZAM/2/2000	ZAM00-02	639	567	0	88.73	11.27
10	O/TAN/9/98	TAN98-09	639	567	0	88.73	11.27

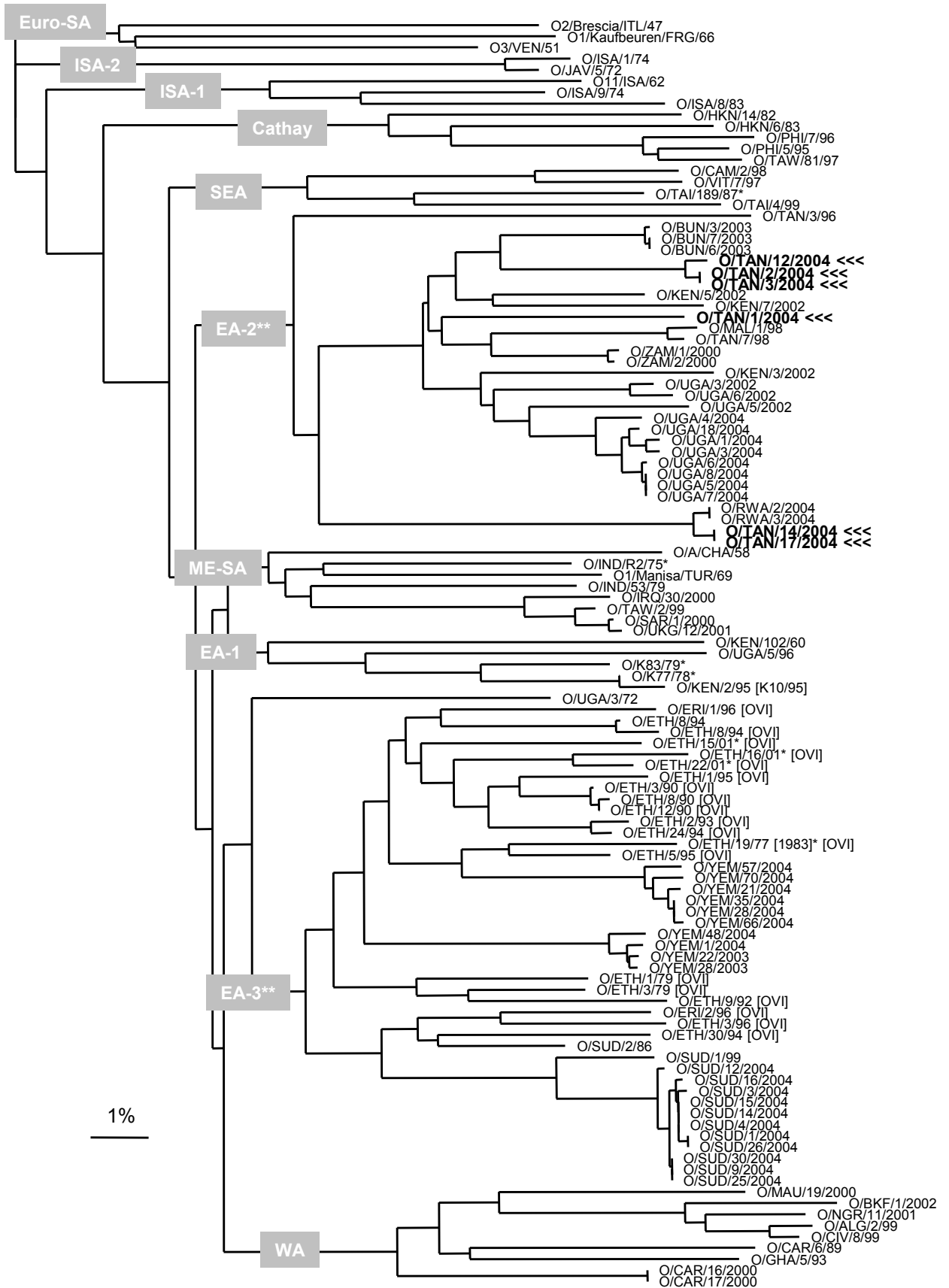
Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	207	177	3	85.51	14.49
2	O/ISR/2/88	ISR88-02	639	546	0	85.45	14.55
3	O/IND/53/79	IND79A53	639	542	0	84.82	15.18
4	O1/Manisa/TUR/69	TUR69--E	639	541	0	84.66	15.34
5	O/TAW/2/99	TAW99-02	639	540	0	84.51	15.49
6	O/IND/R2/75*	IND75--A	639	538	0	84.19	15.81
7	O/TAI/189/87*	TAI87-AC	639	526	0	82.32	17.68
8	O/PHI/5/95	PHI95-05	639	512	0	80.13	19.87
9	O/HKN/6/83	HKN83-06	637	507	2	79.59	20.41
10	O1/BFS 1860/UK/67	UKG67--A	639	503	0	78.72	21.28

nt, nucleotides

*, not a WRLFMD reference number

Report on FMDV O from Tanzania in 2004



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (~639 nt). The tree was outgroup-rooted using the Euro-SA tophotype sequences. Sequences from the Onderstepoort Veterinary Institute (OVI), South Africa were shorter (495 nt).

* Not a WRLFMD Ref. No.
 ** proposed new tophotypes

N.J. Knowles, P.R. Davies, R. J. Midgley
 & J.-F. Valarcher, 26 November 2004