

Serotype: O	Report date: 25/09/2006
WRL Ref No: KEN/23/2004	
Sender Ref: K124/2004	
Date collected: 08/07/2004	
Date received by WRLFMD: 24/01/2006	Topotype: EA-2
Date received for sequencing: 08/02/2006	Genotype/strain: none designated
Species: Cattle	Sequence filename: KEN04-23.SEQ
Material used: BTy1	Date sequence last updated: 15/03/2006
Region sequenced: VP1	Total no. of comparisons: 1977
RT-PCR primers: O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 300
No. of Nt determined: 639	Total turn-around time: 244 days
No. of ambiguities: 0	Sequencing time: 229 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	O/KEN/24/2004	KEN04-24	639	634	0	99.22	0.78
2	O/KEN/29/2004	KEN04-29	639	621	0	97.18	2.82
3	O/KEN/5/2002	KEN02-05	639	618	0	96.71	3.29
4	O/KEN/18/98 (K82/98)	KEN98-18	384	362	17	94.27	5.73
5	O/KEN/26/2005	KEN05-26	639	593	0	92.8	7.2
6	O/UGA/3/2002	UGA02-03	638	592	1	92.79	7.21
7	O/BUN/3/2003	BUN03A03	634	588	4	92.74	7.26
8	O/KEN/7/2002	KEN02-07	639	592	0	92.64	7.36
9	O/KEN/30/2004	KEN04-30	639	592	0	92.64	7.36
10	O/BUN/7/2003	BUN03-07	639	592	0	92.64	7.36

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	549	0	85.92	14.08
2	O/IND/R2/75* [AF204276]	IND75--A	639	544	0	85.13	14.87
3	O/IND/53/79 [AF292107]	IND79A53	639	541	0	84.66	15.34
4	O/ISR/2/88	ISR88-02	639	540	0	84.51	15.49
5	O1/Manisa/TUR/69	TUR69--E	639	538	0	84.19	15.81
6	O/MOR/1/91	MOR91-01	639	537	0	84.04	15.96
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	521	0	81.53	18.47
8	O1/BFS 1860/UK/67	UKG67--A	639	514	0	80.44	19.56
9	O/HKN/6/83	HKN83-06	637	509	2	79.91	20.09
10	O/PHI/5/95	PHI95-05	639	506	0	79.19	20.81

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 25/09/2006
WRL Ref No: KEN/24/2004	
Sender Ref: K139/2004	
Date collected: 30/07/2004	
Date received by WRLFMD: 24/01/2006	Topotype: EA-2
Date received for sequencing: 08/02/2006	Genotype/strain: none designated
Species: Cattle	Sequence filename: KEN04-24.SEQ
Material used: BTy1	Date sequence last updated: 13/06/2006
Region sequenced: VP1	Total no. of comparisons: 1977
RT-PCR primers: O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 300
No. of Nt determined: 639	Total turn-around time: 244 days
No. of ambiguities: 0	Sequencing time: 229 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	O/KEN/23/2004	KEN04-23	639	634	0	99.22	0.78
2	O/KEN/29/2004	KEN04-29	639	618	0	96.71	3.29
3	O/KEN/5/2002	KEN02-05	639	615	0	96.24	3.76
4	O/KEN/18/98 (K82/98)	KEN98-18	384	359	17	93.49	6.51
5	O/BUN/7/2003	BUN03-07	639	591	0	92.49	7.51
6	O/BUN/3/2003	BUN03A03	634	586	4	92.43	7.57
7	O/BUN/6/2003	BUN03A06	628	580	0	92.36	7.64
8	O/UGA/3/2002	UGA02-03	638	589	1	92.32	7.68
9	O/BUN/2/2003	BUN03-02	450	415	1	92.22	7.78
10	O/KEN/26/2005	KEN05-26	639	588	0	92.02	7.98

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	547	0	85.6	14.4
2	O/IND/R2/75* [AF204276]	IND75--A	639	542	0	84.82	15.18
3	O/IND/53/79 [AF292107]	IND79A53	639	540	0	84.51	15.49
4	O/ISR/2/88	ISR88-02	639	539	0	84.35	15.65
5	O/MOR/1/91	MOR91-01	639	536	0	83.88	16.12
6	O1/Manisa/TUR/69	TUR69--E	639	536	0	83.88	16.12
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	520	0	81.38	18.62
8	O1/BFS 1860/UK/67	UKG67--A	639	513	0	80.28	19.72
9	O/HKN/6/83	HKN83-06	637	507	2	79.59	20.41
10	O/PHI/5/95	PHI95-05	639	504	0	78.87	21.13

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KEN/29/2004
Sender Ref: K170/2004
Date collected: 21/10/2004
Date received by WRLFMD: 24/01/2006
Date received for sequencing: 08/02/2006
Species: Cattle
Material used: BTy2
Region sequenced: VP1
RT-PCR primers: O-1C272F/EUR-2B52R;
O-1C244F/EUR-2B52R
No. of Nt determined: 639
No. of ambiguities: 0
Gene length: 639

Report date: 25/09/2006
Topotype: EA-2
Genotype/strain: none designated
Sequence filename: KEN04-29.SEQ
Date sequence last updated: 21/06/2006
Total no. of comparisons: 1977
Min. no. of nt for comparison: 300
Total turn-around time: 244 days
Sequencing time: 229 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KEN/23/2004	KEN04-23	639	621	0	97.18	2.82
2	O/KEN/5/2002	KEN02-05	639	618	0	96.71	3.29
3	O/KEN/24/2004	KEN04-24	639	618	0	96.71	3.29
4	O/KEN/18/98 (K82/98)	KEN98-18	384	363	17	94.53	5.47
5	O/BUN/3/2003	BUN03A03	634	592	4	93.38	6.62
6	O/BUN/3/2003	BUN03-03	500	466	10	93.2	6.8
7	O/BUN/7/2003	BUN03-07	639	595	0	93.11	6.89
8	O/BUN/6/2003	BUN03A06	628	584	0	92.99	7.01
9	O/BUN/2/2003	BUN03-02	450	418	1	92.89	7.11
10	O/KEN/7/2002	KEN02-07	639	591	0	92.49	7.51

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	554	0	86.7	13.3
2	O/IND/R2/75* [AF204276]	IND75--A	639	551	0	86.23	13.77
3	O/IND/53/79 [AF292107]	IND79A53	639	548	0	85.76	14.24
4	O/MOR/1/91	MOR91-01	639	547	0	85.6	14.4
5	O/ISR/2/88	ISR88-02	639	547	0	85.6	14.4
6	O1/Manisa/TUR/69	TUR69--E	639	544	0	85.13	14.87
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	525	0	82.16	17.84
8	O1/BFS 1860/UK/67	UKG67--A	639	519	0	81.22	18.78
9	O/HKN/6/83	HKN83-06	637	513	2	80.53	19.47
10	O/PHI/5/95	PHI95-05	639	511	0	79.97	20.03

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 25/09/2006						
WRL Ref No: KEN/30/2004							
Sender Ref: K176/2004							
Date collected: 24/12/2004							
Date received by WRLFMD: 24/01/2006	Topotype: EA-2						
Date received for sequencing: 08/02/2006	Genotype/strain: none designated						
Species: Cattle	Sequence filename: KEN04-30.SEQ						
Material used: BTy1	Date sequence last updated: 21/06/2006						
Region sequenced: VP1	Total no. of comparisons: 1977						
RT-PCR primers: O-1C272F/EUR-2B52R; O-1C244F/EUR-2B52R	Min. no. of nt for comparison: 300						
No. of Nt determined: 639	Total turn-around time: 244 days						
No. of ambiguities: 0	Sequencing time: 229 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	O/KEN/4/2005	KEN05-04	639	633	0	99.06	0.94
2	O/KEN/26/2005	KEN05-26	639	632	0	98.9	1.1
3	O/KEN/6/2005	KEN05-06	639	630	0	98.59	1.41
4	O/KEN/7/2002	KEN02-07	639	625	0	97.81	2.19
5	O/KEN/18/98 (K82/98)	KEN98-18	384	364	17	94.79	5.21
6	O/KEN/5/2002	KEN02-05	639	599	0	93.74	6.26
7	O/KEN/23/2004	KEN04-23	639	592	0	92.64	7.36
8	O/ZAM/2/2000	ZAM00-02	639	592	0	92.64	7.36
9	O/ZAM/1/2000	ZAM00-01	639	592	0	92.64	7.36
10	O/BUN/2/2003	BUN03-02	450	416	1	92.44	7.56
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	551	0	86.23	13.77
2	O/IND/R2/75* [AF204276]	IND75--A	639	547	0	85.6	14.4
3	O1/Manisa/TUR/69	TUR69--E	639	543	0	84.98	15.02
4	O/IND/53/79 [AF292107]	IND79A53	639	543	0	84.98	15.02
5	O/MOR/1/91	MOR91-01	639	542	0	84.82	15.18
6	O/ISR/2/88	ISR88-02	639	540	0	84.51	15.49
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	523	0	81.85	18.15
8	O1/BFS 1860/UK/67	UKG67--A	639	518	0	81.06	18.94
9	O/HKN/6/83	HKN83-06	637	511	2	80.22	19.78
10	O/PHI/5/95	PHI95-05	639	508	0	79.5	20.5
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O
WRL Ref No: KEN/4/2005
Sender Ref: K7/2005
Date collected: 26/01/2005
Date received by WRLFMD: 24/01/2006
Date received for sequencing: 08/02/2006
Species: Cattle
Material used: BTy1
Region sequenced: VP1
RT-PCR primers: O-1C272F/EUR-2B52R;
O-1C244F/EUR-2B52R
No. of Nt determined: 639
No. of ambiguities: 0
Gene length: 639

Report date: 25/09/2006
Topotype: EA-2
Genotype/strain: none designated
Sequence filename: KEN05-04.SEQ
Date sequence last updated: 04/07/2006
Total no. of comparisons: 1977
Min. no. of nt for comparison: 300
Total turn-around time: 244 days
Sequencing time: 229 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KEN/30/2004	KEN04-30	639	633	0	99.06	0.94
2	O/KEN/26/2005	KEN05-26	639	630	0	98.59	1.41
3	O/KEN/6/2005	KEN05-06	639	628	0	98.28	1.72
4	O/KEN/7/2002	KEN02-07	639	621	0	97.18	2.82
5	O/KEN/18/98 (K82/98)	KEN98-18	384	361	17	94.01	5.99
6	O/KEN/5/2002	KEN02-05	639	597	0	93.43	6.57
7	O/ZAM/2/2000	ZAM00-02	639	592	0	92.64	7.36
8	O/ZAM/1/2000	ZAM00-01	639	592	0	92.64	7.36
9	O/KEN/23/2004	KEN04-23	639	591	0	92.49	7.51
10	O/KEN/29/2004	KEN04-29	639	588	0	92.02	7.98

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	547	0	85.6	14.4
2	O/IND/R2/75* [AF204276]	IND75--A	639	545	0	85.29	14.71
3	O/IND/53/79 [AF292107]	IND79A53	639	544	0	85.13	14.87
4	O1/Manisa/TUR/69	TUR69--E	639	542	0	84.82	15.18
5	O/MOR/1/91	MOR91-01	639	539	0	84.35	15.65
6	O/ISR/2/88	ISR88-02	639	537	0	84.04	15.96
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	518	0	81.06	18.94
8	O1/BFS 1860/UK/67	UKG67--A	639	515	0	80.59	19.41
9	O/HKN/6/83	HKN83-06	637	507	2	79.59	20.41
10	O/PHI/5/95	PHI95-05	639	503	0	78.72	21.28

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 25/09/2006						
WRL Ref No: KEN/6/2005							
Sender Ref: K18/2005							
Date collected: 01/03/2005	Topotype: EA-2						
Date received by WRLFMD: 24/01/2006	Genotype/strain: none designated						
Date received for sequencing: 08/02/2006	Sequence filename: KEN05-06.SEQ						
Species: Cattle	Date sequence last updated: 04/07/2006						
Material used: BTy1	Total no. of comparisons: 1977						
Region sequenced: VP1	Min. no. of nt for comparison: 300						
RT-PCR primers: O-1C272F/EUR-2B52R; O-1C244F/EUR-2B52R	Total turn-around time: 244 days						
No. of Nt determined: 639	Sequencing time: 229 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	O/KEN/26/2005	KEN05-26	639	633	0	99.06	0.94
2	O/KEN/30/2004	KEN04-30	639	630	0	98.59	1.41
3	O/KEN/4/2005	KEN05-04	639	628	0	98.28	1.72
4	O/KEN/7/2002	KEN02-07	639	620	0	97.03	2.97
5	O/KEN/18/98 (K82/98)	KEN98-18	384	359	17	93.49	6.51
6	O/KEN/5/2002	KEN02-05	639	592	0	92.64	7.36
7	O/KEN/23/2004	KEN04-23	639	589	0	92.18	7.82
8	O/ZAM/2/2000	ZAM00-02	639	587	0	91.86	8.14
9	O/ZAM/1/2000	ZAM00-01	639	587	0	91.86	8.14
10	O/BUN/2/2003	BUN03-02	450	413	1	91.78	8.22
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	549	0	85.92	14.08
2	O/IND/R2/75* [AF204276]	IND75--A	639	542	0	84.82	15.18
3	O1/Manisa/TUR/69	TUR69--E	639	542	0	84.82	15.18
4	O/MOR/1/91	MOR91-01	639	539	0	84.35	15.65
5	O/IND/53/79 [AF292107]	IND79A53	639	539	0	84.35	15.65
6	O/ISR/2/88	ISR88-02	639	538	0	84.19	15.81
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	517	0	80.91	19.09
8	O/HKN/6/83	HKN83-06	637	510	2	80.06	19.94
9	O1/BFS 1860/UK/67	UKG67--A	639	509	0	79.66	20.34
10	O/PHI/5/95	PHI95-05	639	508	0	79.5	20.5
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O
 WRL Ref No: KEN/10/2005
 Sender Ref: K34/2005
 Date collected: 01/01/2005
 Date received by WRLFMD: 24/01/2006
 Date received for sequencing: 08/02/2006
 Species: Cattle
 Material used: BTy1
 Region sequenced: VP1
 RT-PCR primers: O-1C272F/EUR-2B52R;
 O-1C244F/EUR-2B52R
 No. of Nt determined: 639
 No. of ambiguities: 0
 Gene length: 639

Report date: 25/09/2006
 Topotype: EA-2
 Genotype/strain: none designated
 Sequence filename: KEN05-10.SEQ
 Date sequence last updated: 22/06/2006
 Total no. of comparisons: 1977
 Min. no. of nt for comparison: 300
 Total turn-around time: 244 days
 Sequencing time: 229 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KEN/27/2005	KEN05-27	639	637	0	99.69	0.31
2	O/KEN/14/2005	KEN05-14	639	635	0	99.37	0.63
3	O/TAN/2/2004	TAN04-02	639	632	0	98.9	1.1
4	O/TAN/3/2004	TAN04-03	639	632	0	98.9	1.1
5	O/TAN/12/2004	TAN04-12	639	630	0	98.59	1.41
6	O/BUN/7/2003	BUN03-07	639	598	0	93.58	6.42
7	O/KEN/18/98 (K82/98)	KEN98-18	384	359	17	93.49	6.51
8	O/BUN/6/2003	BUN03A06	628	587	0	93.47	6.53
9	O/BUN/3/2003	BUN03A03	634	592	4	93.38	6.62
10	O/BUN/3/2003	BUN03-03	500	464	10	92.8	7.2

Relationships to Reference Virus Strains

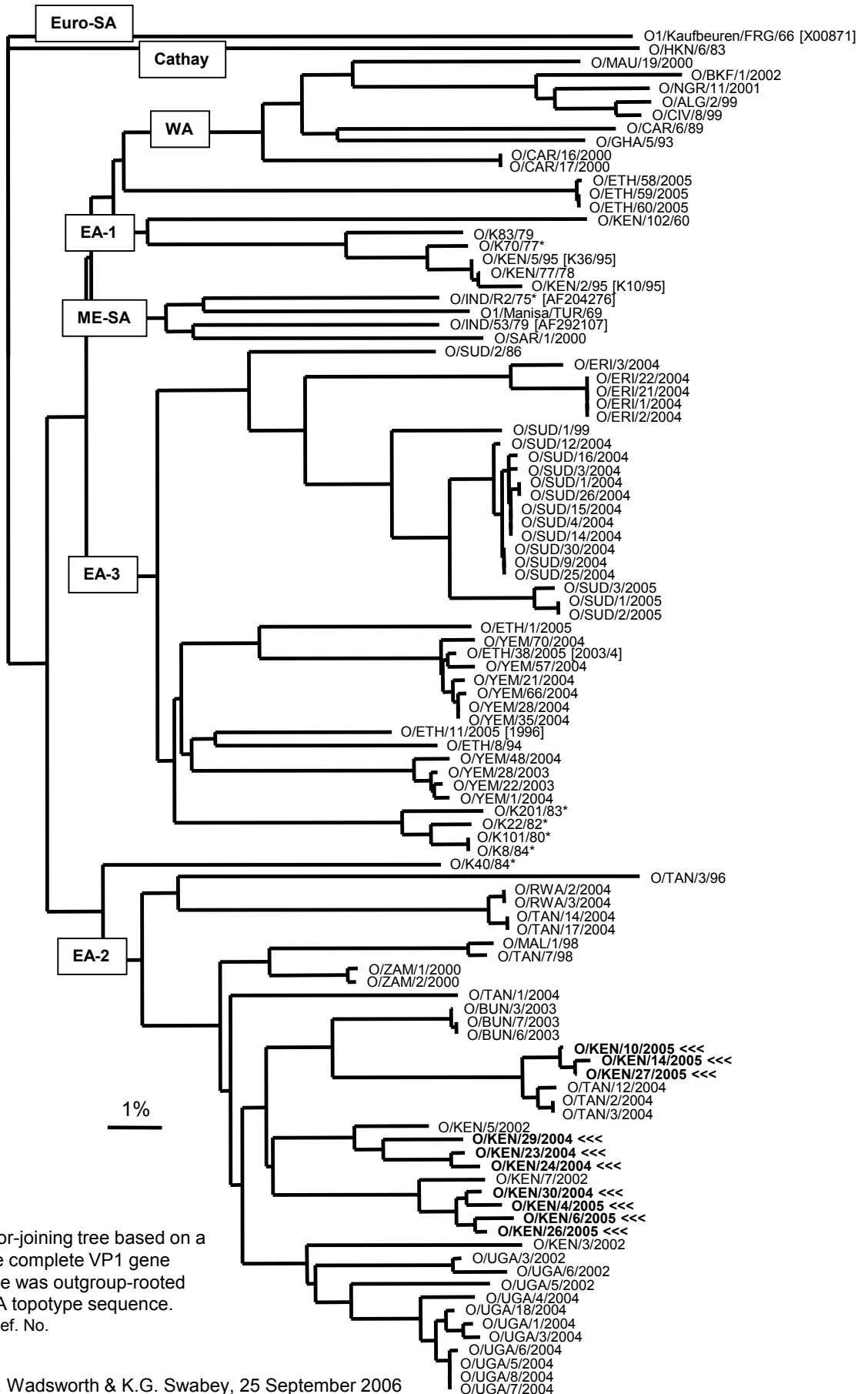
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MOR/1/91	MOR91-01	639	541	0	84.66	15.34
2	O/ISR/2/88	ISR88-02	639	540	0	84.51	15.49
3	O/IND/R2/75* [AF204276]	IND75--A	639	538	0	84.19	15.81
4	O/IND/53/79 [AF292107]	IND79A53	639	537	0	84.04	15.96
5	O/TAW/2/99	TAW99-02	639	535	0	83.72	16.28
6	O1/Manisa/TUR/69	TUR69--E	639	528	0	82.63	17.37
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	517	0	80.91	19.09
8	O1/BFS 1860/UK/67	UKG67--A	639	512	0	80.13	19.87
9	O/PHI/5/95	PHI95-05	639	508	0	79.5	20.5
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: 25/09/2006						
WRL Ref No: KEN/14/2005							
Sender Ref: K48/2005							
Date collected: 21/07/2005	Topotype: EA-2						
Date received by WRLFMD: 24/01/2006	Genotype/strain: none designated						
Date received for sequencing: 08/02/2006	Sequence filename: KEN05-14.SEQ						
Species: Cattle	Date sequence last updated: 22/06/2006						
Material used: BTy1	Total no. of comparisons: 1977						
Region sequenced: VP1	Min. no. of nt for comparison: 300						
RT-PCR primers: O-1C272F/EUR-2B52R; O-1C244F/EUR-2B52R	Total turn-around time: 244 days						
No. of Nt determined: 639	Sequencing time: 229 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	O/KEN/27/2005	KEN05-27	639	637	0	99.69	0.31
2	O/KEN/10/2005	KEN05-10	639	635	0	99.37	0.63
3	O/TAN/2/2004	TAN04-02	639	628	0	98.28	1.72
4	O/TAN/3/2004	TAN04-03	639	628	0	98.28	1.72
5	O/TAN/12/2004	TAN04-12	639	626	0	97.97	2.03
6	O/BUN/7/2003	BUN03-07	639	594	0	92.96	7.04
7	O/BUN/6/2003	BUN03A06	628	583	0	92.83	7.17
8	O/BUN/3/2003	BUN03A03	634	588	4	92.74	7.26
9	O/KEN/18/98 (K82/98)	KEN98-18	384	356	17	92.71	7.29
10	O/BUN/3/2003	BUN03-03	500	462	10	92.4	7.6
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	639	538	0	84.19	15.81
2	O/IND/R2/75* [AF204276]	IND75--A	639	537	0	84.04	15.96
3	O/ISR/2/88	ISR88-02	639	537	0	84.04	15.96
4	O/IND/53/79 [AF292107]	IND79A53	639	535	0	83.72	16.28
5	O/TAW/2/99	TAW99-02	639	533	0	83.41	16.59
6	O1/Manisa/TUR/69	TUR69--E	639	526	0	82.32	17.68
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	515	0	80.59	19.41
8	O1/BFS 1860/UK/67	UKG67--A	639	509	0	79.66	20.34
9	O/PHI/5/95	PHI95-05	639	505	0	79.03	20.97
10	O/HKN/6/83	HKN83-06	637	502	2	78.81	21.19
nt, nucleotides							
*, not a WRLFMD reference number							

Report on FMDV O from Kenya in 2004-2005



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene (~639 nt). The tree was outgroup-rooted using the Euro-SA topotype sequence.
 * Not a WRLFMD Ref. No.