

Serotype: O
WRL Ref No: ETH/2/2006
Sender Ref: 001
Date collected: May 2006
Date received by WRLFMD: 08/12/2006
Date received for sequencing: 18/12/2006
Species: Cattle
Material used: BTy2
Region sequenced: VP1
RT-PCR primers: O-1C244F/EUR-2B52R;
O-1C272F/EUR-2B52R
No. of Nt determined: 639
No. of ambiguities: 0
Gene length: 639

Report date: 10/01/2007
Topotype: East Africa 3 (EA-3)
Genotype/strain: none designated
Sequence filename: ETH06-02.SEQ
Date sequence last updated: 10/01/2007
Total no. of comparisons: 1465
Min. no. of nt for comparison: 300
Total turn-around time: 33 days
Sequencing time: 23 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/ETH/4/2006	ETH06-04	639	636	0	99.53	0.47
2	O/ETH/43/2006	ETH06-43	639	636	0	99.53	0.47
3	O/ETH/21/2006	ETH06-21	639	635	0	99.37	0.63
4	O/ETH/19/2006	ETH06-19	639	634	0	99.22	0.78
5	O/ETH/20/2006	ETH06-20	639	634	0	99.22	0.78
6	O/ETH/27/2006	ETH06-27	639	633	0	99.06	0.94
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	566	0	88.58	11.42
8	O/ETH/3/79 (OVI)	ETH79A03	495	431	0	87.07	12.93
9	O/SUD/2/86 (AY344601)	SUD86A02	495	431	0	87.07	12.93
10	O/SUD/6/89 (AY344603)	SUD89A06	495	431	0	87.07	12.93

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	545	0	85.29	14.71
2	O/IND/53/79 [AF292107]	IND79A53	639	542	0	84.82	15.18
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	538	0	84.19	15.81
4	O/ISR/2/88 (DQ164899)	ISR88-02	639	535	0	83.72	16.28
5	O/MOR/1/91	MOR91-01	639	534	0	83.57	16.43
6	O/IND/R2/75* [AF204276]	IND75--A	639	533	0	83.41	16.59
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	530	0	82.94	17.06
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	508	0	79.5	20.5
9	O/HKN/6/83	HKN83-06	637	505	2	79.28	20.72
10	O1/BFS 1860/UK/67	UKG67--A	639	504	0	78.87	21.13

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: ETH/4/2006
Sender Ref: 003
Date collected: May 2006
Date received by WRLFMD: 08/12/2006
Date received for sequencing: 18/12/2006
Species: Cattle
Material used: BTy2
Region sequenced: VP1
RT-PCR primers: O-1C244F/EUR-2B52R;
O-1C272F/EUR-2B52R
No. of Nt determined: 639
No. of ambiguities: 0
Gene length: 639

Report date: 10/01/2007
Topotype: East Africa 3 (EA-3)
Genotype/strain: none designated
Sequence filename: ETH06-04.SEQ
Date sequence last updated: 10/01/2007
Total no. of comparisons: 1465
Min. no. of nt for comparison: 300
Total turn-around time: 33 days
Sequencing time: 23 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/ETH/43/2006	ETH06-43	639	637	0	99.69	0.31
2	O/ETH/2/2006	ETH06-02	639	636	0	99.53	0.47
3	O/ETH/21/2006	ETH06-21	639	636	0	99.53	0.47
4	O/ETH/19/2006	ETH06-19	639	635	0	99.37	0.63
5	O/ETH/20/2006	ETH06-20	639	635	0	99.37	0.63
6	O/ETH/27/2006	ETH06-27	639	634	0	99.22	0.78
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	567	0	88.73	11.27
8	O/ETH/11/2005 (1996)	ETH05-11	639	557	0	87.17	12.83
9	O/ETH/3/79 (OVI)	ETH79A03	495	431	0	87.07	12.93
10	O/SUD/2/86 (AY344601)	SUD86A02	495	431	0	87.07	12.93

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	546	0	85.45	14.55
2	O/IND/53/79 [AF292107]	IND79A53	639	543	0	84.98	15.02
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	539	0	84.35	15.65
4	O/ISR/2/88 (DQ164899)	ISR88-02	639	536	0	83.88	16.12
5	O/MOR/1/91	MOR91-01	639	535	0	83.72	16.28
6	O/IND/R2/75* [AF204276]	IND75--A	639	534	0	83.57	16.43
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	533	0	83.41	16.59
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	509	0	79.66	20.34
9	O/HKN/6/83	HKN83-06	637	506	2	79.43	20.57
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: 10/01/2007						
WRL Ref No: ETH/19/2006							
Sender Ref: 018							
Date collected: May 2006							
Date received by WRLFMD: 08/12/2006	Topotype: East Africa 3 (EA-3)						
Date received for sequencing: 18/12/2006	Genotype/strain: none designated						
Species: Cattle	Sequence filename: ETH06-19.SEQ						
Material used: BTy2	Date sequence last updated: 10/01/2007						
Region sequenced: VP1	Total no. of comparisons: 1465						
RT-PCR primers: O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 300						
No. of Nt determined: 639	Total turn-around time: 33 days						
No. of ambiguities: 0	Sequencing time: 23 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/ETH/20/2006	ETH06-20	639	637	0	99.69	0.31
2	O/ETH/4/2006	ETH06-04	639	635	0	99.37	0.63
3	O/ETH/43/2006	ETH06-43	639	635	0	99.37	0.63
4	O/ETH/2/2006	ETH06-02	639	634	0	99.22	0.78
5	O/ETH/21/2006	ETH06-21	639	634	0	99.22	0.78
6	O/ETH/27/2006	ETH06-27	639	632	0	98.9	1.1
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	568	0	88.89	11.11
8	O/ETH/11/2005 (1996)	ETH05-11	639	558	0	87.32	12.68
9	O/ETH/3/79 (OVI)	ETH79A03	495	432	0	87.27	12.73
10	O/SUD/2/86 (AY344601)	SUD86A02	495	432	0	87.27	12.73
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	545	0	85.29	14.71
2	O/IND/53/79 [AF292107]	IND79A53	639	542	0	84.82	15.18
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	540	0	84.51	15.49
4	O/IND/R2/75* [AF204276]	IND75--A	639	535	0	83.72	16.28
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	535	0	83.72	16.28
6	O/MOR/1/91	MOR91-01	639	534	0	83.57	16.43
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	532	0	83.26	16.74
8	O/HKN/6/83	HKN83-06	637	505	2	79.28	20.72
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	505	0	79.03	20.97
10	O1/BFS 1860/UK/67	UKG67--A	639	502	0	78.56	21.44
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O
WRL Ref No: ETH/20/2006
Sender Ref: 019
Date collected: May 2006
Date received by WRLFMD: 08/12/2006
Date received for sequencing: 18/12/2006
Species: Cattle
Material used: BTy2
Region sequenced: VP1
RT-PCR primers: O-1C244F/EUR-2B52R;
O-1C272F/EUR-2B52R
No. of Nt determined: 639
No. of ambiguities: 0
Gene length: 639

Report date: 11/01/2007
Topotype: East Africa 3 (EA-3)
Genotype/strain: none designated
Sequence filename: ETH06-20.SEQ
Date sequence last updated: 10/01/2007
Total no. of comparisons: 1465
Min. no. of nt for comparison: 300
Total turn-around time: 34 days
Sequencing time: 24 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/ETH/19/2006	ETH06-19	639	637	0	99.69	0.31
2	O/ETH/4/2006	ETH06-04	639	635	0	99.37	0.63
3	O/ETH/43/2006	ETH06-43	639	635	0	99.37	0.63
4	O/ETH/2/2006	ETH06-02	639	634	0	99.22	0.78
5	O/ETH/21/2006	ETH06-21	639	634	0	99.22	0.78
6	O/ETH/27/2006	ETH06-27	639	632	0	98.9	1.1
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	568	0	88.89	11.11
8	O/ETH/11/2005 (1996)	ETH05-11	639	558	0	87.32	12.68
9	O/ETH/3/79 (OVI)	ETH79A03	495	432	0	87.27	12.73
10	O/SUD/2/86 (AY344601)	SUD86A02	495	432	0	87.27	12.73

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	545	0	85.29	14.71
2	O/IND/53/79 [AF292107]	IND79A53	639	542	0	84.82	15.18
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	540	0	84.51	15.49
4	O/IND/R2/75* [AF204276]	IND75--A	639	535	0	83.72	16.28
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	535	0	83.72	16.28
6	O/MOR/1/91	MOR91-01	639	534	0	83.57	16.43
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	532	0	83.26	16.74
8	O/HKN/6/83	HKN83-06	637	505	2	79.28	20.72
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	505	0	79.03	20.97
10	O1/BFS 1860/UK/67	UKG67--A	639	502	0	78.56	21.44

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 11/01/2007
WRL Ref No: ETH/21/2006	
Sender Ref: 020	
Date collected: May 2006	
Date received by WRLFMD: 08/12/2006	Topotype: East Africa 3 (EA-3)
Date received for sequencing: 18/12/2006	Genotype/strain: none designated
Species: Cattle	Sequence filename: ETH06-21.SEQ
Material used: BTy2	Date sequence last updated: 10/01/2007
Region sequenced: VP1	Total no. of comparisons: 1465
RT-PCR primers: O-1C244F/EUR-2B52R;	Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R	Total turn-around time: 34 days
No. of Nt determined: 639	Sequencing time: 24 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/ETH/4/2006	ETH06-04	639	636	0	99.53	0.47
2	O/ETH/43/2006	ETH06-43	639	636	0	99.53	0.47
3	O/ETH/2/2006	ETH06-02	639	635	0	99.37	0.63
4	O/ETH/19/2006	ETH06-19	639	634	0	99.22	0.78
5	O/ETH/20/2006	ETH06-20	639	634	0	99.22	0.78
6	O/ETH/27/2006	ETH06-27	639	633	0	99.06	0.94
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	566	0	88.58	11.42
8	O/SUD/6/89 (AY344603)	SUD89A06	495	433	0	87.47	12.53
9	O/ETH/3/79 (OVI)	ETH79A03	495	431	0	87.07	12.93
10	O/SUD/2/86 (AY344601)	SUD86A02	495	431	0	87.07	12.93

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	545	0	85.29	14.71
2	O/IND/53/79 [AF292107]	IND79A53	639	542	0	84.82	15.18
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	540	0	84.51	15.49
4	O/ISR/2/88 (DQ164899)	ISR88-02	639	537	0	84.04	15.96
5	O/MOR/1/91	MOR91-01	639	536	0	83.88	16.12
6	O/IND/R2/75* [AF204276]	IND75--A	639	535	0	83.72	16.28
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	532	0	83.26	16.74
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	508	0	79.5	20.5
9	O/HKN/6/83	HKN83-06	637	505	2	79.28	20.72
10	O1/BFS 1860/UK/67	UKG67--A	639	506	0	79.19	20.81

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: ETH/27/2006
Sender Ref: 026
Date collected: May 2006
Date received by WRLFMD: 08/12/2006
Date received for sequencing: 18/12/2006
Species: Cattle
Material used: BTy2
Region sequenced: VP1
RT-PCR primers: O-1C244F/EUR-2B52R;
O-1C272F/EUR-2B52R
No. of Nt determined: 639
No. of ambiguities: 0
Gene length: 639

Report date: 10/01/2007
Topotype: East Africa 3 (EA-3)
Genotype/strain: none designated
Sequence filename: ETH06-27.SEQ
Date sequence last updated: 10/01/2007
Total no. of comparisons: 1465
Min. no. of nt for comparison: 300
Total turn-around time: 33 days
Sequencing time: 23 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/ETH/4/2006	ETH06-04	639	634	0	99.22	0.78
2	O/ETH/43/2006	ETH06-43	639	634	0	99.22	0.78
3	O/ETH/2/2006	ETH06-02	639	633	0	99.06	0.94
4	O/ETH/21/2006	ETH06-21	639	633	0	99.06	0.94
5	O/ETH/19/2006	ETH06-19	639	632	0	98.9	1.1
6	O/ETH/20/2006	ETH06-20	639	632	0	98.9	1.1
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	564	0	88.26	11.74
8	O/SUD/6/89 (AY344603)	SUD89A06	495	431	0	87.07	12.93
9	O/ETH/11/2005 (1996)	ETH05-11	639	556	0	87.01	12.99
10	O/LIB/6/88	LIB88-06	639	554	0	86.7	13.3

Relationships to Reference Virus Strains

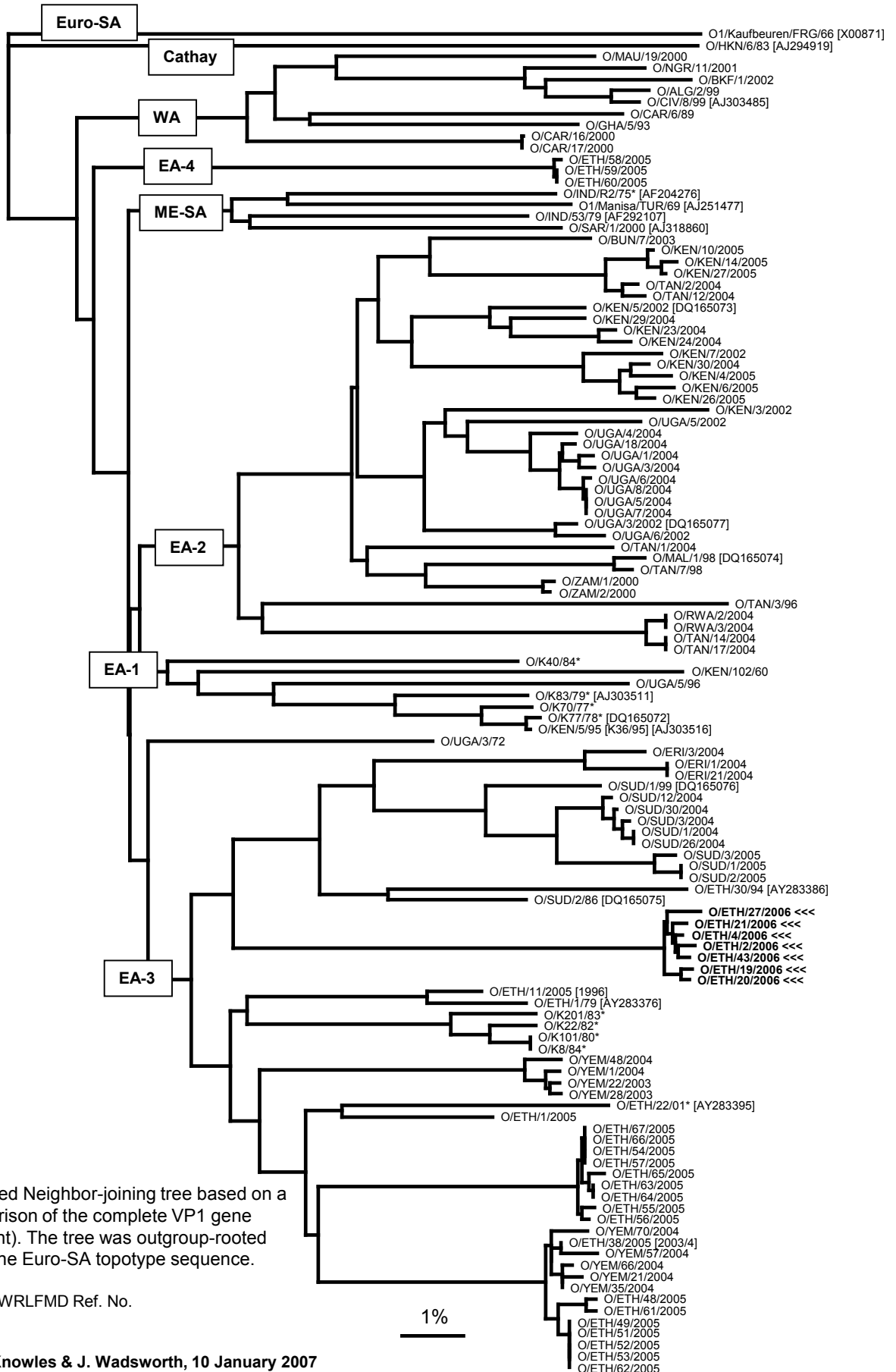
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	545	0	85.29	14.71
2	O/IND/53/79 [AF292107]	IND79A53	639	542	0	84.82	15.18
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	538	0	84.19	15.81
4	O/ISR/2/88 (DQ164899)	ISR88-02	639	535	0	83.72	16.28
5	O/MOR/1/91	MOR91-01	639	534	0	83.57	16.43
6	O/IND/R2/75* [AF204276]	IND75--A	639	533	0	83.41	16.59
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	530	0	82.94	17.06
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	507	0	79.34	20.66
9	O/HKN/6/83	HKN83-06	637	504	2	79.12	20.88
10	O1/BFS 1860/UK/67	UKG67--A	639	502	0	78.56	21.44

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 10/01/2007						
WRL Ref No: ETH/43/2006							
Sender Ref: 047							
Date collected: Oct 2006							
Date received by WRLFMD: 08/12/2006	Topotype: East Africa 3 (EA-3)						
Date received for sequencing: 18/12/2006	Genotype/strain: none designated						
Species: Cattle	Sequence filename: ETH06-43.SEQ						
Material used: BTy2	Date sequence last updated: 10/01/2007						
Region sequenced: VP1	Total no. of comparisons: 1465						
RT-PCR primers: O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R	Min. no. of nt for comparison: 300						
No. of Nt determined: 639	Total turn-around time: 33 days						
No. of ambiguities: 0	Sequencing time: 23 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/ETH/4/2006	ETH06-04	639	637	0	99.69	0.31
2	O/ETH/2/2006	ETH06-02	639	636	0	99.53	0.47
3	O/ETH/21/2006	ETH06-21	639	636	0	99.53	0.47
4	O/ETH/19/2006	ETH06-19	639	635	0	99.37	0.63
5	O/ETH/20/2006	ETH06-20	639	635	0	99.37	0.63
6	O/ETH/27/2006	ETH06-27	639	634	0	99.22	0.78
7	O/SUD/2/86 (DQ165075)	SUD86-02	639	567	0	88.73	11.27
8	O/ETH/11/2005 (1996)	ETH05-11	639	559	0	87.48	12.52
9	O/ETH/3/79 (OVI)	ETH79A03	495	432	0	87.27	12.73
10	O/SUD/2/86 (AY344601)	SUD86A02	495	432	0	87.27	12.73
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	546	0	85.45	14.55
2	O/IND/53/79 [AF292107]	IND79A53	639	543	0	84.98	15.02
3	O/TAI/189/87* [TRRL]	TAI87-AC	639	539	0	84.35	15.65
4	O/ISR/2/88 (DQ164899)	ISR88-02	639	536	0	83.88	16.12
5	O/MOR/1/91	MOR91-01	639	535	0	83.72	16.28
6	O/IND/R2/75* [AF204276]	IND75--A	639	534	0	83.57	16.43
7	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	531	0	83.1	16.9
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	507	0	79.34	20.66
9	O/HKN/6/83	HKN83-06	637	504	2	79.12	20.88
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 Ethiopia in 2006



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.