

Serotype: O		Report date: 10/01/2008					
WRL Ref No: MAY/4/2007							
Sender Ref: MVKKB 4631/07							
Date collected: 30/09/2007							
Date received by WRLFMD: 30/11/2007		Topotype: SEA					
Date received for sequencing: 07/12/2007		Genotype/strain: Mya98					
Species: Cattle		Sequence filename: MAY07-04.SEQ					
Material used: BTy1		Date sequence last updated: 19/12/2007					
Region sequenced: VP1		Total no. of comparisons: 1701					
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: 41 days					
No. of ambiguities: 0		Sequencing time: 34 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/MAY/6/2007	MAY07-06	639	638	0	99.84	0.16
2	O/MAY/7/2007	MAY07-07	639	637	0	99.69	0.31
3	O/MAY/5/2007	MAY07-05	639	635	0	99.37	0.63
4	O/MAY/9/2007	MAY07-09	639	635	0	99.37	0.63
5	O/TAI/1/2005	TAI05-01	639	622	0	97.34	2.66
6	O/TAI/8/2005	TAI05-08	639	622	0	97.34	2.66
7	O/MYA/7/2002 (DQ164928)	MYA02-07	639	615	0	96.24	3.76
8	O/MYA/4/2004	MYA04-04	639	614	0	96.09	3.91
9	O/MYA/5/04* [TRRL]	MYA04-AE	639	614	0	96.09	3.91
10	O/TAI/21/05* (TRRL)	TAI05-AC	639	611	0	95.62	4.38
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAI/189/87* [TRRL]	TAI87-AC	639	569	0	89.05	10.95
2	O/IND/R2/75* [AF204276]	IND75--A	639	545	0	85.29	14.71
3	O/TAW/2/99	TAW99-02	639	543	0	84.98	15.02
4	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	542	0	84.82	15.18
5	O/IND/53/79 [AF292107]	IND79A53	639	541	0	84.66	15.34
6	O/MOR/1/91	MOR91-01	639	533	0	83.41	16.59
7	O/ISR/2/88 (DQ164899)	ISR88-02	639	530	0	82.94	17.06
8	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	507	0	79.34	20.66
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	496	0	77.62	22.38
10	O/HKN/6/83	HKN83-06	637	494	2	77.55	22.45
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O
WRL Ref No: MAY/5/2007
Sender Ref: MVKKB 4736/07
Date collected: 04/10/2007
Date received by WRLFMD: 30/11/2007
Date received for sequencing: 07/12/2007
Species: Cattle
Material used: BTy1
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: 10/01/2008
Topotype: SEA
Genotype/strain: Mya98
Sequence filename: MAY07-05.SEQ
Date sequence last updated: 19/12/2007
Total no. of comparisons: 1701
Min. no. of nt for comparison: 300
Total turn-around time: 41 days
Sequencing time: 34 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/MAY/6/2007	MAY07-06	639	636	0	99.53	0.47
2	O/MAY/4/2007	MAY07-04	639	635	0	99.37	0.63
3	O/MAY/7/2007	MAY07-07	639	635	0	99.37	0.63
4	O/MAY/9/2007	MAY07-09	639	633	0	99.06	0.94
5	O/TAI/1/2005	TAI05-01	639	622	0	97.34	2.66
6	O/TAI/8/2005	TAI05-08	639	622	0	97.34	2.66
7	O/MYA/7/2002 (DQ164928)	MYA02-07	639	613	0	95.93	4.07
8	O/MYA/4/2004	MYA04-04	639	612	0	95.77	4.23
9	O/MYA/5/04* [TRRL]	MYA04-AE	639	612	0	95.77	4.23
10	O/TAI/21/05* (TRRL)	TAI05-AC	639	611	0	95.62	4.38

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAI/189/87* [TRRL]	TAI87-AC	639	567	0	88.73	11.27
2	O/IND/R2/75* [AF204276]	IND75--A	639	543	0	84.98	15.02
3	O/TAW/2/99	TAW99-02	639	541	0	84.66	15.34
4	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	540	0	84.51	15.49
5	O/IND/53/79 [AF292107]	IND79A53	639	539	0	84.35	15.65
6	O/MOR/1/91	MOR91-01	639	533	0	83.41	16.59
7	O/ISR/2/88 (DQ164899)	ISR88-02	639	530	0	82.94	17.06
8	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	506	0	79.19	20.81
9	O/HKN/6/83	HKN83-06	637	494	2	77.55	22.45
10	O/PHI/5/95 (DQ164946)	PHI95-05	639	494	0	77.31	22.69

nt, nucleotides
*, not a WRLFMD reference number

Serotype: O	Report date: 10/01/2008						
WRL Ref No: MAY/6/2007							
Sender Ref: MVKKB 4774/07							
Date collected: 10/10/2007	Topotype: SEA						
Date received by WRLFMD: 30/11/2007	Genotype/strain: Mya98						
Date received for sequencing: 07/12/2007	Sequence filename: MAY07-06.SEQ						
Species: Cattle	Date sequence last updated: 19/12/2007						
Material used: BTy1	Total no. of comparisons: 1701						
Region sequenced: VP1	Min. no. of nt for comparison: 300						
RT-PCR primers: O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R	Total turn-around time: 41 days						
No. of Nt determined: 639	Sequencing time: 34 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/MAY/4/2007	MAY07-04	639	638	0	99.84	0.16
2	O/MAY/5/2007	MAY07-05	639	636	0	99.53	0.47
3	O/MAY/7/2007	MAY07-07	639	636	0	99.53	0.47
4	O/MAY/9/2007	MAY07-09	639	634	0	99.22	0.78
5	O/TAI/1/2005	TAI05-01	639	621	0	97.18	2.82
6	O/TAI/8/2005	TAI05-08	639	621	0	97.18	2.82
7	O/MYA/7/2002 (DQ164928)	MYA02-07	639	614	0	96.09	3.91
8	O/MYA/4/2004	MYA04-04 MYA04-	639	613	0	95.93	4.07
9	O/MYA/5/04* [TRRL]	AE	639	613	0	95.93	4.07
10	O/TAI/21/05* (TRRL)	TAI05-AC	639	610	0	95.46	4.54
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAI/189/87* [TRRL]	TAI87-AC	639	568	0	88.89	11.11
2	O/IND/R2/75* [AF204276]	IND75--A	639	544	0	85.13	14.87
3	O/TAW/2/99	TAW99-02	639	542	0	84.82	15.18
4	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	541	0	84.66	15.34
5	O/IND/53/79 [AF292107]	IND79A53	639	540	0	84.51	15.49
6	O/MOR/1/91	MOR91-01	639	534	0	83.57	16.43
7	O/ISR/2/88 (DQ164899)	ISR88-02	639	531	0	83.1	16.9
8	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	507	0	79.34	20.66
9	O/HKN/6/83	HKN83-06	637	495	2	77.71	22.29
10	O/PHI/5/95 (DQ164946)	PHI95-05	639	495	0	77.46	22.54
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O Report date: 10/01/2008
WRL Ref No: MAY/7/2007
Sender Ref: MVKKB 4799/07
Date collected: 20/10/2007
Date received by WRLFMD: 30/11/2007 Topotype: SEA
Date received for sequencing: 07/12/2007 Genotype/strain: Mya98
Species: Cattle Sequence filename: MAY07-07.SEQ
Material used: BTy1 Date sequence last updated: 11/12/2007
Region sequenced: VP1 Total no. of comparisons: 1701
RT-PCR primers: O-1C244F/EUR-2B52R; Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R Total turn-around time: 41 days
No. of Nt determined: 639 Sequencing time: 34 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/MAY/4/2007	MAY07-04	639	637	0	99.69	0.31
2	O/MAY/6/2007	MAY07-06	639	636	0	99.53	0.47
3	O/MAY/5/2007	MAY07-05	639	635	0	99.37	0.63
4	O/MAY/9/2007	MAY07-09	639	635	0	99.37	0.63
5	O/TAI/1/2005	TAI05-01	639	622	0	97.34	2.66
6	O/TAI/8/2005	TAI05-08	639	622	0	97.34	2.66
7	O/MYA/7/2002 (DQ164928)	MYA02-07	639	615	0	96.24	3.76
8	O/MYA/4/2004	MYA04-04	639	614	0	96.09	3.91
9	O/MYA/5/04* [TRRL]	MYA04-AE	639	614	0	96.09	3.91
10	O/TAI/21/05* (TRRL)	TAI05-AC	639	611	0	95.62	4.38

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAI/189/87* [TRRL]	TAI87-AC	639	569	0	89.05	10.95
2	O/IND/R2/75* [AF204276]	IND75--A	639	545	0	85.29	14.71
3	O/TAW/2/99	TAW99-02	639	543	0	84.98	15.02
4	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	542	0	84.82	15.18
5	O/IND/53/79 [AF292107]	IND79A53	639	541	0	84.66	15.34
6	O/MOR/1/91	MOR91-01	639	533	0	83.41	16.59
7	O/ISR/2/88 (DQ164899)	ISR88-02	639	530	0	82.94	17.06
8	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	507	0	79.34	20.66
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	496	0	77.62	22.38
10	O/HKN/6/83	HKN83-06	637	494	2	77.55	22.45

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 10/01/2008						
WRL Ref No: MAY/9/2007							
Sender Ref: MVKKB 5031/07							
Date collected: 07/11/2007							
Date received by WRLFMD: 30/11/2007	Topotype: SEA						
Date received for sequencing: 07/12/2007	Genotype/strain: Mya98						
Species: Cattle	Sequence filename: MAY07-09.SEQ						
Material used: BTy1	Date sequence last updated: 19/12/2007						
Region sequenced: VP1	Total no. of comparisons: 1701						
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: 41 days						
No. of ambiguities: 0	Sequencing time: 34 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/MAY/4/2007	MAY07-04	639	635	0	99.37	0.63
2	O/MAY/7/2007	MAY07-07	639	635	0	99.37	0.63
3	O/MAY/6/2007	MAY07-06	639	634	0	99.22	0.78
4	O/MAY/5/2007	MAY07-05	639	633	0	99.06	0.94
5	O/TAI/1/2005	TAI05-01	639	620	0	97.03	2.97
6	O/TAI/8/2005	TAI05-08	639	620	0	97.03	2.97
7	O/MYA/7/2002 (DQ164928)	MYA02-07	639	613	0	95.93	4.07
8	O/MYA/4/2004	MYA04-04	639	612	0	95.77	4.23
9	O/MYA/5/04* [TRRL]	MYA04-AE	639	612	0	95.77	4.23
10	O/TAI/21/05* (TRRL)	TAI05-AC	639	609	0	95.31	4.69
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAI/189/87* [TRRL]	TAI87-AC	639	567	0	88.73	11.27
2	O/IND/R2/75* [AF204276]	IND75--A	639	546	0	85.45	14.55
3	O/TAW/2/99	TAW99-02	639	543	0	84.98	15.02
4	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	543	0	84.98	15.02
5	O/IND/53/79 [AF292107]	IND79A53	639	541	0	84.66	15.34
6	O/MOR/1/91	MOR91-01	639	534	0	83.57	16.43
7	O/ISR/2/88 (DQ164899)	ISR88-02	639	531	0	83.1	16.9
8	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	508	0	79.5	20.5
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	496	0	77.62	22.38
10	O/HKN/6/83	HKN83-06	637	494	2	77.55	22.45
nt, nucleotides							
*, not a WRLFMD reference number							

Report on FMDV O from Malaysia in 2007

Software: MEGA 3.1
 No. of Taxa : 139
 Data File : n:\levd\meg\db\fm\o\MAY2007a.meg
 Data Title : MAY/2007
 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: Kimura 2-parameter
 Substitutions to Include : d: Transitions + Transversions
 Pattern among Lineages : Same (Homogeneous)
 Rates among sites : Uniform rates
 No. of Sites : 639
 No Of Bootstrap Reps = 1000
 Only bootstrap values of 70% and above are shown

N.J. Knowles & J. Wadsworth, 10 January 2008

