

Serotype: O	Report date: 18/09/2006						
WRL Ref No: MAY/1/2005							
Sender Ref: MVKKB 1081/05							
Date collected: 22/06/2005	Topotype: SEA						
Date received by WRLFMD: 23/12/2005	Genotype/strain: Mya98						
Date received for sequencing: 16/01/2006	Sequence filename: MAY05-01.SEQ						
Species: Cattle	Date sequence last updated: 05/09/2006						
Material used: BTy1	Total no. of comparisons: 1968						
Region sequenced: VP1	Min. no. of nt for comparison: 300						
RT-PCR primers: O-1C272F/EUR-2B52R	Total turn-around time: 269 days						
No. of Nt determined: 639	Sequencing time: 245 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/2/2005	MAY05-02	639	631	0	98.75	1.25
2	O/TAI/3/2003	TAI03-03	639	617	0	96.56	3.44
3	O/LAO/7/2003	LAO03-07	598	570	4	95.32	4.68
4	O/MYA/7/2002	MYA02-07	639	608	0	95.15	4.85
5	O/LAO/4/2001	LAO01-04	639	608	0	95.15	4.85
6	O/VIT/6/2005	VIT05-06	639	608	0	95.15	4.85
7	O/MYA/4/2004	MYA04-04	639	607	0	94.99	5.01
8	O/MYA/5/04* [TRRL]	MYA04-AE	639	607	0	94.99	5.01
9	O/LAO/2/2001	LAO01-02	630	598	9	94.92	5.08
10	O/MAY/6/2001	MAY01-06	639	606	0	94.84	5.16
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	573	0	89.67	10.33
2	O/TAW/2/99	TAW99-02	639	544	0	85.13	14.87
3	O/IND/R2/75* [AF204276]	IND75--A	639	543	0	84.98	15.02
4	O1/Manisa/TUR/69	TUR69--E	639	538	0	84.19	15.81
5	O/IND/53/79 [AF292107]	IND79A53	639	536	0	83.88	16.12
6	O/MOR/1/91	MOR91-01	639	527	0	82.47	17.53
7	O/ISR/2/88	ISR88-02	639	526	0	82.32	17.68
8	O1/BFS 1860/UK/67	UKG67--A	639	501	0	78.4	21.6
9	O/PHI/5/95	PHI95-05	639	500	0	78.25	21.75
10	O/HKN/6/83	HKN83-06	637	496	2	77.86	22.14
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O Report date: 18/09/2006
WRL Ref No: MAY/2/2005
Sender Ref: MVKKB 144/05
Date collected: 02/12/2005
Date received by WRLFMD: 23/12/2005 Topotype: SEA
Date received for sequencing: 16/01/2006 Genotype/strain: Mya98
Species: Cattle Sequence filename: MAY05-02.SEQ
Material used: BTy1 Date sequence last updated: 25/07/2006
Region sequenced: VP1 Total no. of comparisons: 1968
RT-PCR primers: O-1C272F/EUR-2B52R Min. no. of nt for comparison: 300
No. of Nt determined: 639 Total turn-around time: 269 days
No. of ambiguities: 0 Sequencing time: 245 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/1/2005	MAY05-01	639	631	0	98.75	1.25
2	O/TAI/3/2003	TAI03-03	639	619	0	96.87	3.13
3	O/LAO/7/2003	LAO03-07	598	572	4	95.65	4.35
4	O/LAO/2/2001	LAO01-02	630	602	9	95.56	4.44
5	O/LAO/4/2001	LAO01-04	639	610	0	95.46	4.54
6	O/VIT/6/2005	VIT05-06	639	610	0	95.46	4.54
7	O/MYA/7/2002	MYA02-07	639	609	0	95.31	4.69
8	O/MAY/6/2001	MAY01-06	639	608	0	95.15	4.85
9	O/MAY/5/2001	MAY01-05	639	608	0	95.15	4.85
10	O/MYA/5/04* [TRRL]	MYA04-AE	639	608	0	95.15	4.85

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	575	0	89.98	10.02
2	O/TAW/2/99	TAW99-02	639	544	0	85.13	14.87
3	O/IND/R2/75* [AF204276]	IND75--A	639	542	0	84.82	15.18
4	O1/Manisa/TUR/69	TUR69--E	639	537	0	84.04	15.96
5	O/IND/53/79 [AF292107]	IND79A53	639	535	0	83.72	16.28
6	O/MOR/1/91	MOR91-01	639	526	0	82.32	17.68
7	O/ISR/2/88	ISR88-02	639	525	0	82.16	17.84
8	O1/BFS 1860/UK/67	UKG67--A	639	502	0	78.56	21.44
9	O/PHI/5/95	PHI95-05	639	502	0	78.56	21.44
10	O/HKN/6/83	HKN83-06	637	498	2	78.18	21.82

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O		Report date: 18/09/2006					
WRL Ref No: MAY/3/2005							
Sender Ref: MVKKB 2122/05							
Date collected: 29/09/2005							
Date received by WRLFMD: 23/12/2005		Topotype: ME-SA					
Date received for sequencing: 16/01/2006		Genotype/strain: PanAsia					
Species: Cattle		Sequence filename: MAY05-03.SEQ					
Material used: BTy1		Date sequence last updated: 12/09/2006					
Region sequenced: VP1		Total no. of comparisons: 1968					
RT-PCR primers: O-1C272F/EUR-2B52R;		Min. no. of nt for comparison: 300					
O-1C244F/EUR-2B52R		Total turn-around time: 269 days					
No. of Nt determined: 639		Sequencing time: 245 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/7/2005	MAY05-07	639	639	0	100	0
2	O/MAY/4/2005	MAY05-04	639	639	0	100	0
3	O/MAY/6/2005	MAY05-06	639	639	0	100	0
4	O/MAY/2/2004	MAY04-02	608	597	0	98.19	1.81
5	O/MAY/3/2004	MAY04-03	606	594	0	98.02	1.98
6	O/NEP/2/2003	NEP03-02	638	623	1	97.65	2.35
7	O/NEP/4/2003	NEP03-04	639	623	0	97.5	2.5
8	O/AFG/2004 (PIADC)	AFG04-AA	639	623	0	97.5	2.5
9	O/PAK/10/2006	PAK06-10	639	622	0	97.34	2.66
10	O/PAK/4/2006	PAK06-04	639	622	0	97.34	2.66
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	604	0	94.52	5.48
2	O/IND/53/79 [AF292107]	IND79A53	639	574	0	89.83	10.17
3	O/IND/R2/75* [AF204276]	IND75--A	639	572	0	89.51	10.49
4	O1/Manisa/TUR/69	TUR69--E	639	565	0	88.42	11.58
5	O/ISR/2/88	ISR88-02	639	559	0	87.48	12.52
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	558	0	87.32	12.68
7	O/MOR/1/91	MOR91-01	639	556	0	87.01	12.99
8	O/PHI/5/95	PHI95-05	639	522	0	81.69	18.31
9	O/HKN/6/83	HKN83-06	637	514	2	80.69	19.31
10	O1/BFS 1860/UK/67	UKG67--A	639	511	0	79.97	20.03
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O Report date: 18/09/2006
WRL Ref No: MAY/4/2005
Sender Ref: MVKKB 2399/05
Date collected: 20/10/2005 Topotype: ME-SA
Date received by WRLFMD: 23/12/2005 Genotype/strain: PanAsia
Date received for sequencing: 16/01/2006 Sequence filename: MAY05-04.SEQ
Species: Cattle Date sequence last updated: 12/09/2006
Material used: BTy1 Total no. of comparisons: 1968
Region sequenced: VP1 Min. no. of nt for comparison: 300
RT-PCR primers: O-1C272F/EUR-2B52R; Total turn-around time: 269 days
O-1C244F/EUR-2B52R Sequencing time: 245 days
No. of Nt determined: 639
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/7/2005	MAY05-07	639	639	0	100	0
2	O/MAY/3/2005	MAY05-03	639	639	0	100	0
3	O/MAY/6/2005	MAY05-06	639	639	0	100	0
4	O/MAY/2/2004	MAY04-02	608	597	0	98.19	1.81
5	O/MAY/3/2004	MAY04-03	606	594	0	98.02	1.98
6	O/NEP/2/2003	NEP03-02	638	623	1	97.65	2.35
7	O/NEP/4/2003	NEP03-04	639	623	0	97.5	2.5
8	O/AFG/2004 (PIADC)	AFG04-AA	639	623	0	97.5	2.5
9	O/PAK/10/2006	PAK06-10	639	622	0	97.34	2.66
10	O/PAK/4/2006	PAK06-04	639	622	0	97.34	2.66

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	604	0	94.52	5.48
2	O/IND/53/79 [AF292107]	IND79A53	639	574	0	89.83	10.17
3	O/IND/R2/75* [AF204276]	IND75--A	639	572	0	89.51	10.49
4	O1/Manisa/TUR/69	TUR69--E	639	565	0	88.42	11.58
5	O/ISR/2/88	ISR88-02	639	559	0	87.48	12.52
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	558	0	87.32	12.68
7	O/MOR/1/91	MOR91-01	639	556	0	87.01	12.99
8	O/PHI/5/95	PHI95-05	639	522	0	81.69	18.31
9	O/HKN/6/83	HKN83-06	637	514	2	80.69	19.31
10	O1/BFS 1860/UK/67	UKG67--A	639	511	0	79.97	20.03

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O		Report date: 18/09/2006					
WRL Ref No: MAY/6/2005							
Sender Ref: MVKKB 2533/05							
Date collected: 11/11/2005							
Date received by WRLFMD: 23/12/2005		Topotype: ME-SA					
Date received for sequencing: 16/01/2006		Genotype/strain: PanAsia					
Species: Pig		Sequence filename: MAY05-06.SEQ					
Material used: BTy1		Date sequence last updated: 12/09/2006					
Region sequenced: VP1		Total no. of comparisons: 1968					
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: 269 days					
No. of ambiguities: 0		Sequencing time: 245 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/7/2005	MAY05-07	639	639	0	100	0
2	O/MAY/3/2005	MAY05-03	639	639	0	100	0
3	O/MAY/4/2005	MAY05-04	639	639	0	100	0
4	O/MAY/2/2004	MAY04-02	608	597	0	98.19	1.81
5	O/MAY/3/2004	MAY04-03	606	594	0	98.02	1.98
6	O/NEP/2/2003	NEP03-02	638	623	1	97.65	2.35
7	O/NEP/4/2003	NEP03-04	639	623	0	97.5	2.5
8	O/AFG/2004 (PIADC)	AFG04-AA	639	623	0	97.5	2.5
9	O/PAK/10/2006	PAK06-10	639	622	0	97.34	2.66
10	O/PAK/4/2006	PAK06-04	639	622	0	97.34	2.66
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	604	0	94.52	5.48
2	O/IND/53/79 [AF292107]	IND79A53	639	574	0	89.83	10.17
3	O/IND/R2/75* [AF204276]	IND75--A	639	572	0	89.51	10.49
4	O1/Manisa/TUR/69	TUR69--E	639	565	0	88.42	11.58
5	O/ISR/2/88	ISR88-02	639	559	0	87.48	12.52
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	558	0	87.32	12.68
7	O/MOR/1/91	MOR91-01	639	556	0	87.01	12.99
8	O/PHI/5/95	PHI95-05	639	522	0	81.69	18.31
9	O/HKN/6/83	HKN83-06	637	514	2	80.69	19.31
10	O1/BFS 1860/UK/67	UKG67--A	639	511	0	79.97	20.03
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: O Report date: 18/09/2006
WRL Ref No: MAY/7/2005
Sender Ref: MVKKB 2545/05
Date collected: 15/12/2005
Date received by WRLFMD: 23/12/2005 Topotype: ME-SA
Date received for sequencing: 16/01/2006 Genotype/strain: PanAsia
Species: Cattle Sequence filename: MAY05-07.SEQ
Material used: BTy1 Date sequence last updated: 05/09/2006
Region sequenced: VP1 Total no. of comparisons: 1968
RT-PCR primers: O-1C272F/EUR-2B52R Min. no. of nt for comparison: 300
No. of Nt determined: 639 Total turn-around time: 269 days
No. of ambiguities: 0 Sequencing time: 245 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/6/2005	MAY05-06	639	639	0	100	0
2	O/MAY/3/2005	MAY05-03	639	639	0	100	0
3	O/MAY/4/2005	MAY05-04	639	639	0	100	0
4	O/MAY/2/2004	MAY04-02	608	597	0	98.19	1.81
5	O/MAY/3/2004	MAY04-03	606	594	0	98.02	1.98
6	O/NEP/2/2003	NEP03-02	638	623	1	97.65	2.35
7	O/NEP/4/2003	NEP03-04	639	623	0	97.5	2.5
8	O/AFG/2004 (PIADC)	AFG04-AA	639	623	0	97.5	2.5
9	O/PAK/10/2006	PAK06-10	639	622	0	97.34	2.66
10	O/PAK/4/2006	PAK06-04	639	622	0	97.34	2.66

Relationships to Reference Virus Strains

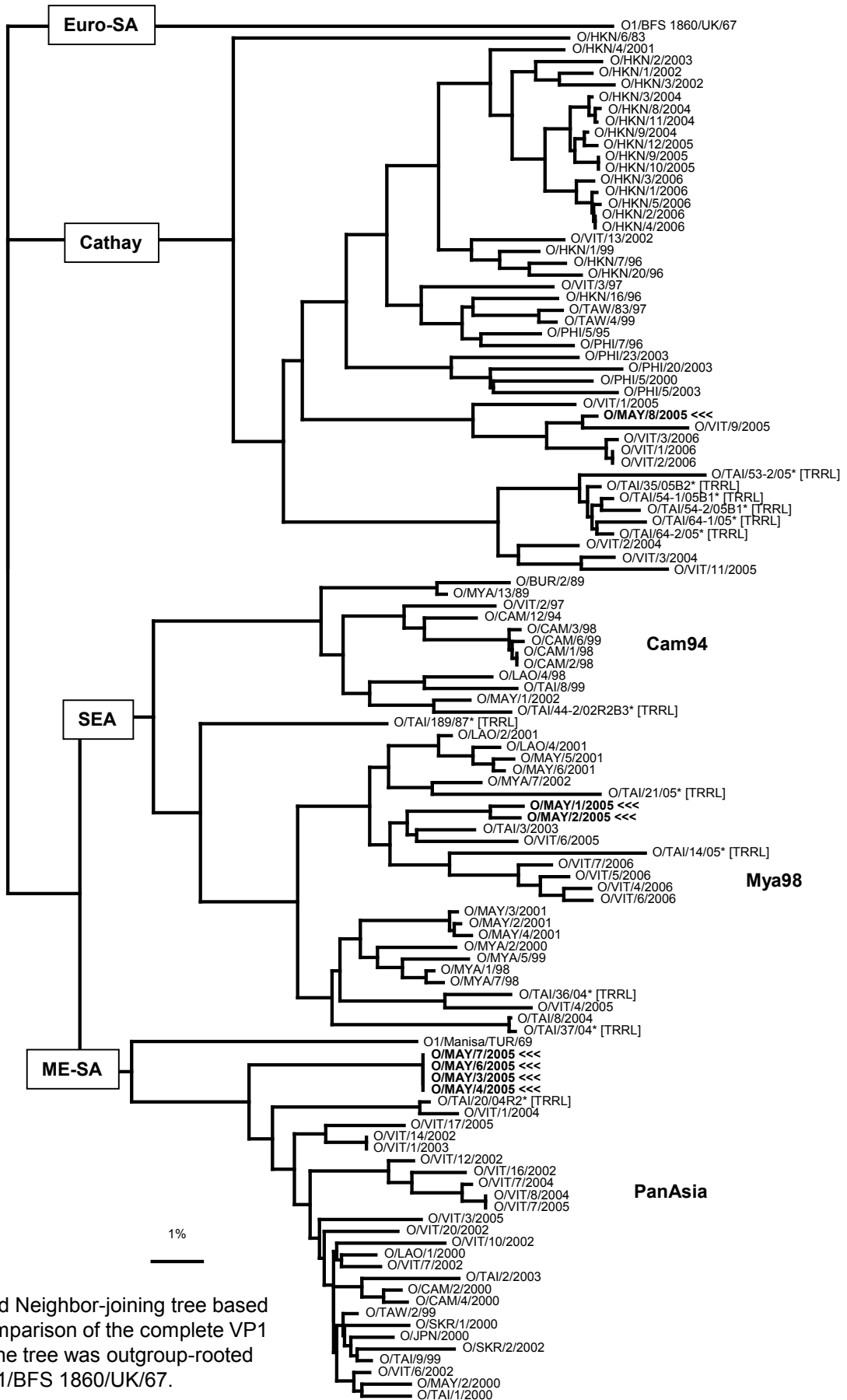
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	639	604	0	94.52	5.48
2	O/IND/53/79 [AF292107]	IND79A53	639	574	0	89.83	10.17
3	O/IND/R2/75* [AF204276]	IND75--A	639	572	0	89.51	10.49
4	O1/Manisa/TUR/69	TUR69--E	639	565	0	88.42	11.58
5	O/ISR/2/88	ISR88-02	639	559	0	87.48	12.52
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	558	0	87.32	12.68
7	O/MOR/1/91	MOR91-01	639	556	0	87.01	12.99
8	O/PHI/5/95	PHI95-05	639	522	0	81.69	18.31
9	O/HKN/6/83	HKN83-06	637	514	2	80.69	19.31
10	O1/BFS 1860/UK/67	UKG67--A	639	511	0	79.97	20.03

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 18/09/2006						
WRL Ref No: MAY/8/2005							
Sender Ref: MVKKB 2696/05							
Date collected: 02/12/2005	Topotype: Cathay						
Date received by WRLFMD: 23/12/2005	Genotype/strain: none						
Date received for sequencing: 16/01/2006	Sequence filename: MAY05-08.SEQ						
Species: Pig	Date sequence last updated: 18/09/2006						
Material used: BTy1	Total no. of comparisons: 1968						
Region sequenced: VP1	Min. no. of nt for comparison: 300						
RT-PCR primers: O-1C283F/EUR-2B52R;	Total turn-around time: 269 days						
O-1C272F/EUR-2B52R;	Sequencing time: 245 days						
O-1C244F/EUR-2B52R							
No. of Nt determined: 639							
No. of ambiguities: 0							
Gene length: 639							
Comments: This is the first report of the Cathay topotype in Malaysia.							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/VIT/1/2006	VIT06-01	639	627	0	98.12	1.88
2	O/VIT/2/2006	VIT06-02	639	627	0	98.12	1.88
3	O/VIT/2/05* [TRRL]	VIT05-AB	639	625	0	97.81	2.19
4	O/VIT/3/2006	VIT06-03	639	625	0	97.81	2.19
5	O/VIT/9/2005	VIT05-09	639	624	0	97.65	2.35
6	O/VIT/1/2005	VIT05-01	639	614	0	96.09	3.91
7	O/VIT/7/05* [TRRL]	VIT05-AG	639	610	0	95.46	4.54
8	O/VIT/1/05* [TRRL]	VIT05-AA	639	606	0	94.84	5.16
9	O/VIT/3/97	VIT97-03	639	585	0	91.55	8.45
10	O/HKN/9/94	HKN94-09	360	329	0	91.39	8.61
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/PHI/5/95	PHI95-05	639	576	0	90.14	9.86
2	O/HKN/6/83	HKN83-06	637	554	2	86.97	13.03
3	O/TAW/2/99	TAW99-02	639	516	0	80.75	19.25
4	O1/Manisa/TUR/69	TUR69--E	639	509	0	79.66	20.34
5	O/IND/53/79 [AF292107]	IND79A53	639	509	0	79.66	20.34
6	O/ISR/2/88	ISR88-02	639	506	0	79.19	20.81
7	O/TAI/189/87* [TRRL]	TAI87-AC	639	506	0	79.19	20.81
8	O/MOR/1/91	MOR91-01	639	505	0	79.03	20.97
9	O/IND/R2/75* [AF204276]	IND75--A	639	504	0	78.87	21.13
10	O1/BFS 1860/UK/67	UKG67--A	639	488	0	76.37	23.63
nt, nucleotides							
*, not a WRLFMD reference number							

Report on FMDV-O Malaysia 2005



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using O1/BFS 1860/UK/67.