

**Report from the Molecular Epidemiology Section of the Experimental Epidemiology Group to the
Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Date: 08/06/2003
Virus isolate: VIT/7/2002	Reported by: N.J. Knowles
Material used: BTy1	Signed (file copy only):
Region sequenced: VP1	Seq. filename: VIT02-07
RT-PCR primer set: O-1C272F/NK61	
Topotype: ME-SA	No. of ambiguities: 0
Genotype/strain: PanAsia	Date seq. last updated: 31/05/2003
No. of nt determined / no. in gene: 633 / 639	Total no. of comparisons made: 1304

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/Kinmen/TAW/99	TAW99--A	159	157	0	98.74	1.26
2	O/Tibet/CHA/2/99*	CHA99-02	633	625	0	98.74	1.26
3	O/UAE/2/99	UAE99-02	224	221	7	98.66	1.34
4	O/Tibet/CHA/3/99*	CHA99-03	633	624	0	98.58	1.42
5	O/TAW/2/99	TAW99-02	633	624	0	98.58	1.42
6	O/LAO/2/2000	LAO00-02	633	624	0	98.58	1.42
7	O/LAO/1/2000	LAO00-01	629	620	4	98.57	1.43
8	O/TAW/1/99	TAW99-01	628	619	5	98.57	1.43
9	O/VIT/1/2002	VIT02-01	205	202	0	98.54	1.46
10	O/VIT/17/99	VIT99-17	458	451	1	98.47	1.53

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	633	624	0	98.58	1.42
2	O/IND/53/79	IND79A53	633	570	0	90.05	9.95
3	O1/Manisa/TUR/69	TUR69--E	633	564	0	89.10	10.90
4	O/IND/R2/75*	IND75--A	633	559	0	88.31	11.69
5	O/TAI/189/87*	TAI87--B	526	456	3	86.69	13.31
6	O/MOR/1/91	MOR91-01	201	172	3	85.57	14.43
7	O/ISR/1/88	ISR88-01	187	159	5	85.03	14.97
8	O/HKN/6/83	HKN83-06	631	509	2	80.67	19.33
9	O/PHI/5/95	PHI95-05	510	411	6	80.59	19.41
10	O1/BFS 1860/UK/67	UKG67--A	633	507	0	80.09	19.91

nt, nucleotides

*, not a WRLFMD reference number

cc. Head of Experimental Epidemiology Group

cc. Head of Vesicular Diseases Group

**Report from the Molecular Epidemiology Section of the Experimental Epidemiology Group to the
Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Date: 08/06/2003						
Virus isolate: VIT/8/2002	Reported by: N.J. Knowles						
Material used: BTy1	Signed (file copy only):						
Region sequenced: VP1	Seq. filename: VIT02-08						
RT-PCR primer set: O-1C272F/NK61							
Topotype: ME-SA	No. of ambiguities: 2						
Genotype/strain: PanAsia	Date seq. last updated: 06/04/2003						
No. of nt determined / no. in gene: 637 / 639	Total no. of comparisons made: 1304						
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/VIT/9/2002	VIT02-09	637	637	2	100.00	0.00
2	O/Kinmen/TAW/99*	TAW99--A	163	162	2	99.39	0.61
3	O/VIT/10/2002	VIT02-10	637	631	2	99.06	0.94
4	O/IND/61/97* (1996)	IND96-AB	163	161	2	98.77	1.23
5	O/IND/289/97*	IND97-AW	163	161	2	98.77	1.23
6	O/IND/209/99* (1998)	IND98-AU	163	161	2	98.77	1.23
7	O/UAE/2/99	UAE99-02	224	221	7	98.66	1.34
8	O/UAE/7/99	UAE99-07	254	250	4	98.43	1.57
9	O/TUR/4/99*	TUR99-AA	124	122	2	98.39	1.61
10	O/TAW/2/99	TAW99-02	637	626	2	98.27	1.73
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	637	626	2	98.27	1.73
2	O/IND/53/79	IND79A53	637	573	2	89.95	10.05
3	O1/Manisa/TUR/69	TUR69--E	637	567	2	89.01	10.99
4	O/IND/R2/75*	IND75--A	637	565	2	88.70	11.30
5	O/TAI/189/87*	TAI87--B	526	453	4	86.12	13.88
6	O/MOR/1/91	MOR91-01	205	175	5	85.37	14.63
7	O/ISR/1/88	ISR88-01	191	163	7	85.34	14.66
8	O1/BFS 1860/UK/67	UKG67--A	637	520	2	81.63	18.37
9	O/HKN/6/83	HKN83-06	635	515	4	81.10	18.90
10	O/PHI/5/95	PHI95-05	514	415	8	80.74	19.26
nt, nucleotides							
*, not a WRLFMD reference number							

cc. Head of Experimental Epidemiology Group

cc. Head of Vesicular Diseases Group

**Report from the Molecular Epidemiology Section of the Experimental Epidemiology Group to the
Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Date: 08/06/2003						
Virus isolate: VIT/9/2002	Reported by: N.J. Knowles						
Material used: BTy1	Signed (file copy only):						
Region sequenced: VP1	Seq. filename: VIT02-09						
RT-PCR primer set: O-1C272F/NK61							
Topotype: ME-SA	No. of ambiguities: 0						
Genotype/strain: PanAsia	Date seq. last updated: 06/04/2003						
No. of nt determined / no. in gene: 639 / 639	Total no. of comparisons made: 1304						
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/VIT/8/2002	VIT02-08	637	637	2	100.00	0.00
2	O/Kinmen/TAW/99*	TAW99--A	165	164	0	99.39	0.61
3	O/VIT/10/2002	VIT02-10	639	633	0	99.06	0.94
4	O/IND/61/97* (1996)	IND96-AB	165	163	0	98.79	1.21
5	O/IND/289/97*	IND97-AW	165	163	0	98.79	1.21
6	O/IND/209/99* (1998)	IND98-AU	165	163	0	98.79	1.21
7	O/UAE/2/99	UAE99-02	224	221	7	98.66	1.34
8	O/UAE/7/99	UAE99-07	254	250	4	98.43	1.57
9	O/TUR/4/99*	TUR99-AA	126	124	0	98.41	1.59
10	O/TAW/2/99	TAW99-02	639	628	0	98.28	1.72
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	628	0	98.28	1.72
2	O/IND/53/79	IND79A53	639	575	0	89.98	10.02
3	O1/Manisa/TUR/69	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75*	IND75--A	639	567	0	88.73	11.27
5	O/TAI/189/87*	TAI87--B	527	453	3	85.96	14.04
6	O/MOR/1/91	MOR91-01	207	177	3	85.51	14.49
7	O/ISR/1/88	ISR88-01	193	165	5	85.49	14.51
8	O1/BFS 1860/UK/67	UKG67--A	639	520	0	81.38	18.62
9	O/HKN/6/83	HKN83-06	637	517	2	81.16	18.84
10	O/PHI/5/95	PHI95-05	516	417	6	80.81	19.19
nt, nucleotides							
*, not a WRLFMD reference number							

cc. Head of Experimental Epidemiology Group

cc. Head of Vesicular Diseases Group

**Report from the Molecular Epidemiology Section of the Experimental Epidemiology Group to the
Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Date: 08/06/2003
Virus isolate: VIT/10/2002	Reported by: N.J. Knowles
Material used: BTy1	Signed (file copy only):
Region sequenced: VP1	Seq. filename: VIT02-10
RT-PCR primer set: O-1C272F/NK61	
Topotype: ME-SA	No. of ambiguities: 0
Genotype/strain: PanAsia	Date seq. last updated: 31/05/2003
No. of nt determined / no. in gene: 639 / 639	Total no. of comparisons made: 1304

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/VIT/9/2002	VIT02-09	639	633	0	99.06	0.94
2	O/VIT/8/2002	VIT02-08	637	631	2	99.06	0.94
3	O/Kinmen/TAW/99*	TAW99--A	165	163	0	98.79	1.21
4	O/TUR/4/99*	TUR99-AA	126	124	0	98.41	1.59
5	O/IND/81/99* (1998)	IND98-AO	165	162	0	98.18	1.82
6	O/IND/209/99* (1998)	IND98-AU	165	162	0	98.18	1.82
7	O/IND/289/97*	IND97-AW	165	162	0	98.18	1.82
8	O/IND/61/97* (1996)	IND96-AB	165	162	0	98.18	1.82
9	O/Tibet/CHA/2/99*	CHA99-02	639	625	0	97.81	2.19
10	O/UAE/2/99	UAE99-02	224	219	7	97.77	2.23

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	622	0	97.34	2.66
2	O/IND/53/79	IND79A53	639	575	0	89.98	10.02
3	O1/Manisa/TUR/69	TUR69--E	639	568	0	88.89	11.11
4	O/IND/R2/75*	IND75--A	639	564	0	88.26	11.74
5	O/MOR/1/91	MOR91-01	207	178	3	85.99	14.01
6	O/TAI/189/87*	TAI87--B	527	452	3	85.77	14.23
7	O/ISR/1/88	ISR88-01	193	165	5	85.49	14.51
8	O1/BFS 1860/UK/67	UKG67--A	639	520	0	81.38	18.62
9	O/PHI/5/95	PHI95-05	516	417	6	80.81	19.19
10	O/HKN/6/83	HKN83-06	637	514	2	80.69	19.31

nt, nucleotides

*, not a WRLFMD reference number

cc. Head of Experimental Epidemiology Group

cc. Head of Vesicular Diseases Group

**Report from the Molecular Epidemiology Section of the Experimental Epidemiology Group to the
Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Date: 08/06/2003						
Virus isolate: VIT/12/2002	Reported by: N.J. Knowles						
Material used: BTy1	Signed (file copy only):						
Region sequenced: VP1	Seq. filename: VIT02-12						
RT-PCR primer set: O-1C272F/NK61							
Topotype: ME-SA	No. of ambiguities: 0						
Genotype/strain: PanAsia	Date seq. last updated: 31/05/2003						
No. of nt determined / no. in gene: 639 / 639	Total no. of comparisons made: 1304						
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/VIT/19/2002	VIT02-19	639	635	0	99.37	0.63
2	O/IND/289/97*	IND97-AW	165	163	0	98.79	1.21
3	O/IND/61/97* (1996)	IND96-AB	165	163	0	98.79	1.21
4	O/IND/209/99* (1998)	IND98-AU	165	163	0	98.79	1.21
5	O/IND/160/99*	IND99-AF	209	206	1	98.56	1.44
6	O/IND/64/97*	IND97-AI	252	248	0	98.41	1.59
7	O/SKR/2/2000	SKR00-02	230	226	7	98.26	1.74
8	O/IND/170/97*	IND97-AR	228	224	0	98.25	1.75
9	O/IND/281/97*	IND97-AV	165	162	0	98.18	1.82
10	O/IND/54/98*	IND98-AA	165	162	0	98.18	1.82
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	621	0	97.18	2.82
2	O/IND/53/79	IND79A53	639	575	0	89.98	10.02
3	O1/Manisa/TUR/69	TUR69--E	639	571	0	89.36	10.64
4	O/IND/R2/75*	IND75--A	639	566	0	88.58	11.42
5	O/ISR/1/88	ISR88-01	193	167	5	86.53	13.47
6	O/TAI/189/87*	TAI87--B	527	456	3	86.53	13.47
7	O/MOR/1/91	MOR91-01	207	179	3	86.47	13.53
8	O/PHI/5/95	PHI95-05	516	420	6	81.40	18.60
9	O/HKN/6/83	HKN83-06	637	518	2	81.32	18.68
10	O1/BFS 1860/UK/67	UKG67--A	639	517	0	80.91	19.09
nt, nucleotides							
*, not a WRLFMD reference number							

cc. Head of Experimental Epidemiology Group

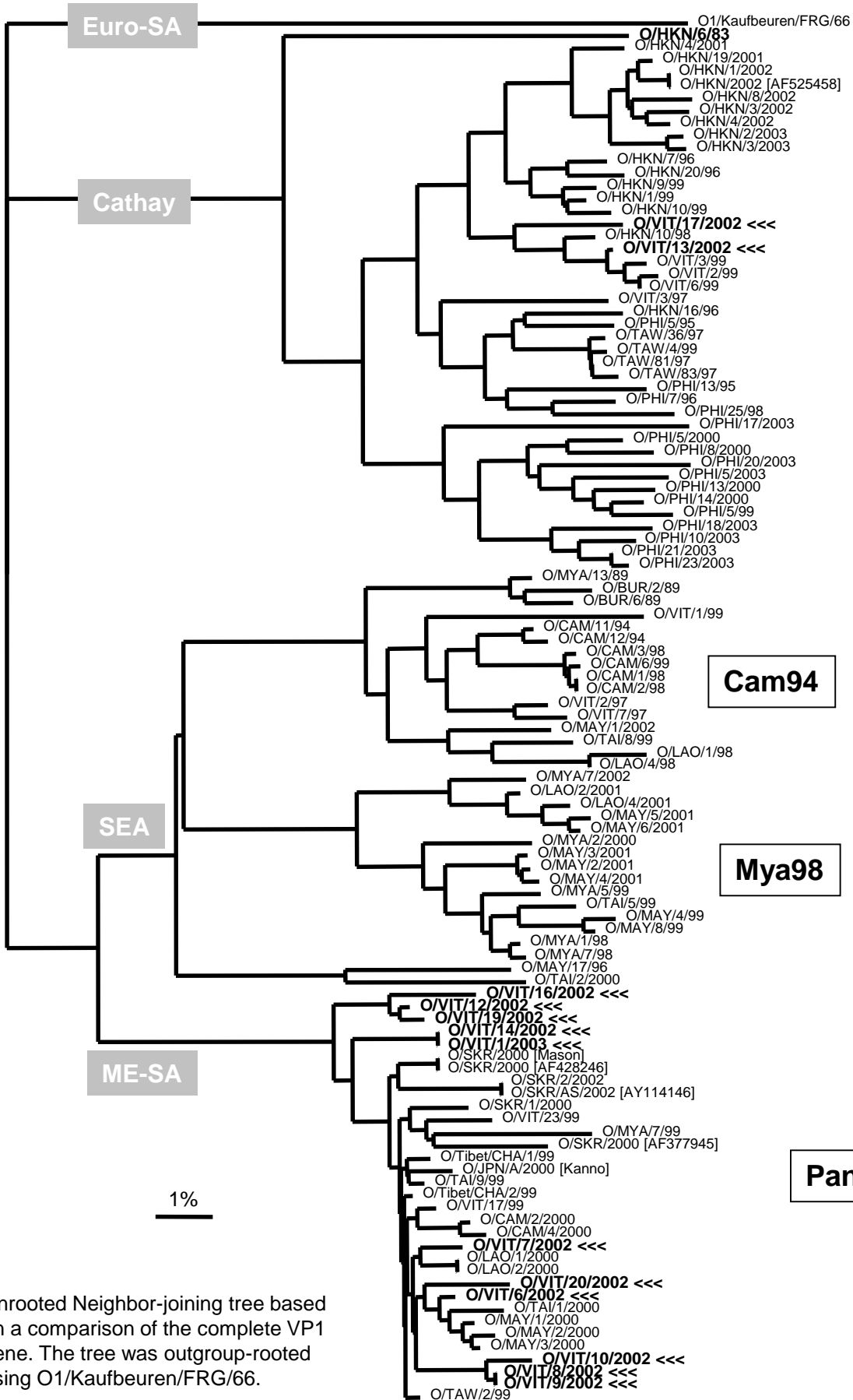
cc. Head of Vesicular Diseases Group

**Report from the Molecular Epidemiology Section of the Experimental Epidemiology Group to the
Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Date: 08/06/2003						
Virus isolate: VIT/13/2002	Reported by: N.J. Knowles						
Material used: RS1	Signed (file copy only):						
Region sequenced: VP1	Seq. filename: VIT02-13						
RT-PCR primer set: O-1C272F/NK61							
Topotype: Cathay	No. of ambiguities: 0						
Genotype/strain: Hkn94	Date seq. last updated: 31/05/2003						
No. of nt determined / no. in gene: 639 / 639	Total no. of comparisons made: 1304						
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/VIT/6/99	VIT99-06	503	500	1	99.40	0.60
2	O/VIT/3/99	VIT99-03	502	498	2	99.20	0.80
3	O/VIT/2/99	VIT99-02	447	443	8	99.11	0.89
4	O/HKN/10/98	HKN98-10	614	604	3	98.37	1.63
5	O/HKN/6/97	HKN97-06	589	572	5	97.11	2.89
6	O/HKN/5/97	HKN97-05	546	529	7	96.89	3.11
7	O/HKN/1/99	HKN99-01	636	615	3	96.70	3.30
8	O/HKN/7/96	HKN96-07	633	611	6	96.52	3.48
9	O/VIT/17/2002	VIT02-17	629	607	0	96.50	3.50
10	O/HKN/7/98	HKN98-07	578	557	11	96.37	3.63
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	516	480	6	93.02	6.98
2	O/HKN/6/83	HKN83-06	637	562	2	88.23	11.77
3	O/IND/53/79	IND79A53	639	524	0	82.00	18.00
4	O/TAW/2/99	TAW99-02	639	522	0	81.69	18.31
5	O1/Manisa/TUR/69	TUR69--E	639	515	0	80.59	19.41
6	O/ISR/1/88	ISR88-01	193	155	5	80.31	19.69
7	O/MOR/1/91	MOR91-01	207	166	3	80.19	19.81
8	O/IND/R2/75*	IND75--A	639	508	0	79.50	20.50
9	O/TAI/189/87*	TAI87--B	527	414	3	78.56	21.44
10	O1/BFS 1860/UK/67	UKG67--A	639	486	0	76.06	23.94
nt, nucleotides							
*, not a WRLFMD reference number							

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cc. Head of Vesicular Diseases Group



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using O1/Kaufbeuren/FRG/66.