

**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Report date: 18/03/2004						
WRL Ref No: IRN/27/2003							
Date collected: 19/05/2003							
Date received: 03/07/2003	Topotype: ME-SA						
Species: Sheep	Genotype/strain: Irn2001						
Material used: 10% epith. susp.	Sequence filename: IRN03-27.SEQ						
Region sequenced: VP1	Date sequence last updated: 18/03/2004						
RT-PCR primers: O-1C272F-NK61; O-1C283F-NK61	Total no. of comparisons: 1388						
No. of Nt determined: 626							
No. of ambiguities: 1							
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/IRN/8/2003	IRN03-08	626	621	1	99.20	0.80
2	O/IRN/6/2003	IRN03-06	625	619	2	99.04	0.96
3	O/IRN/4/2003	IRN03-04	624	618	3	99.04	0.96
4	O/IRN/39/2003	IRN03-39	625	618	2	98.88	1.12
5	O/IRN/38/2003	IRN03-38	605	598	2	98.84	1.16
6	O/IRN/18/2001	IRN01-18	419	414	11	98.81	1.19
7	O/UAE/2/2003	UAE03-02	544	537	2	98.71	1.29
8	O/UAE/3/2003	UAE03-03	536	528	1	98.51	1.49
9	O/IRN/28/2003	IRN03-28	261	257	0	98.47	1.53
10	O/IRN/15/2003	IRN03-15	623	613	4	98.39	1.61
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	626	571	1	91.21	8.79
2	O/IND/53/79	IND79A53	626	563	1	89.94	10.06
3	O1/Manisa/TUR/69	TUR69--E	626	558	1	89.14	10.86
4	O/IND/R2/75*	IND75--A	626	556	1	88.82	11.18
5	O/ISR/1/88	ISR88-01	181	159	5	87.85	12.15
6	O/MOR/1/91	MOR91-01	196	171	2	87.24	12.76
7	O/TAI/189/87*	TAI87-AC	626	540	1	86.26	13.74
8	O1/BFS 1860/UK/67	UKG67--A	626	509	1	81.31	18.69
9	O/HKN/6/83	HKN83-06	624	506	3	81.09	18.91
10	O/PHI/5/95	PHI95-05	503	404	7	80.32	19.68
nt, nucleotides							
*, not a WRLFMD reference number							

**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Report date: 18/03/2004
WRL Ref No: IRN/36/2003	
Date collected: 26/05/2003	
Date received: 03/07/2003	
Species: not known	Topotype: ME-SA
Material used: 10% epith. susp.	Genotype/strain: Irn2001
Region sequenced: VP1	Sequence filename: IRN03-36.SEQ
RT-PCR primers: O-1C244F/NK61; O-1C283F-NK61	Date sequence last updated: 18/03/2004
No. of Nt determined: 605	Total no. of comparisons: 1388
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/PAK/16/2002	PAK02-16	605	598	0	98.84	1.16
2	O/PAK/15/2002	PAK02-15	605	598	0	98.84	1.16
3	O/IRN/18/2001	IRN01-18	398	390	10	97.99	2.01
4	O/PAK/18/2002	PAK02-18	605	591	0	97.69	2.31
5	O/PAK/19/2002	PAK02-19	605	589	0	97.36	2.64
6	O/IRN/28/2003	IRN03-28	261	254	0	97.32	2.68
7	O/IRN/6/2003	IRN03-06	604	586	1	97.02	2.98
8	O/IRN/4/2003	IRN03-04	604	586	1	97.02	2.98
9	O/IRN/61/2001	IRN01-61	604	586	1	97.02	2.98
10	O/IRN/55/2001	IRN01-55	597	579	0	96.98	3.02

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	605	549	0	90.74	9.26
2	O1/Manisa/TUR/69	TUR69--E	605	542	0	89.59	10.41
3	O/IND/53/79	IND79A53	605	539	0	89.09	10.91
4	O/IND/R2/75*	IND75--A	605	532	0	87.93	12.07
5	O/MOR/1/91	MOR91-01	174	151	2	86.78	13.22
6	O/ISR/1/88	ISR88-01	159	137	5	86.16	13.84
7	O/TAI/189/87*	TAI87-AC	605	517	0	85.45	14.55
8	O/HKN/6/83	HKN83-06	603	491	2	81.43	18.57
9	O1/BFS 1860/UK/67	UKG67--A	605	488	0	80.66	19.34
10	O/PHI/5/95	PHI95-05	482	388	6	80.50	19.50

nt, nucleotides

*, not a WRLFMD reference number

**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O		Report date: 18/03/2004					
WRL Ref No: IRN/38/2003							
Date collected: 27/05/2003							
Date received: 03/07/2003		Topotype: ME-SA					
Species: Sheep		Genotype/strain: Irn2001					
Material used: 10% epith. susp.		Sequence filename: IRN03-38.SEQ					
Region sequenced: VP1		Date sequence last updated: 18/03/2004					
RT-PCR primers: O-1C272F/NK61; O-1C244F/NK61; O-1C283F-NK61		Total no. of comparisons: 1388					
No. of Nt determined: 605							
No. of ambiguities: 2							
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/IRN/39/2003	IRN03-39	605	605	2	100.00	0.00
2	O/IRN/4/2003	IRN03-04	604	601	3	99.50	0.50
3	O/IRN/6/2003	IRN03-06	604	599	3	99.17	0.83
4	O/IRN/8/2003	IRN03-08	605	599	2	99.01	0.99
5	O/UAE/2/2003	UAE03-02	523	517	3	98.85	1.15
6	O/IRN/27/2003	IRN03-27	605	598	2	98.84	1.16
7	O/UAE/3/2003	UAE03-03	515	509	2	98.83	1.17
8	O/IRN/18/2001	IRN01-18	399	394	11	98.75	1.25
9	O/IRN/15/2003	IRN03-15	603	594	4	98.51	1.49
10	O/IRN/28/2003	IRN03-28	261	257	0	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	605	553	2	91.40	8.60
2	O/IND/53/79	IND79A53	605	545	2	90.08	9.92
3	O1/Manisa/TUR/69	TUR69--E	605	540	2	89.26	10.74
4	O/IND/R2/75*	IND75--A	605	536	2	88.60	11.40
5	O/TAI/189/87*	TAI87-AC	605	524	2	86.61	13.39
6	O/MOR/1/91	MOR91-01	175	151	3	86.29	13.71
7	O/ISR/1/88	ISR88-01	160	138	6	86.25	13.75
8	O1/BFS 1860/UK/67	UKG67--A	605	491	2	81.16	18.84
9	O/HKN/6/83	HKN83-06	603	489	4	81.09	18.91
10	O/PHI/5/95	PHI95-05	482	386	8	80.08	19.92
nt, nucleotides							
*, not a WRLFMD reference number							

**Report from the Molecular Epidemiology Section of the Dept. of Exotic Disease Control to
the Head of the World Reference Laboratory for FMD (Non-QAU Form)**

Serotype: O	Report date: 18/03/2004
WRL Ref No: IRN/39/2003	
Date collected: 27/05/2003	
Date received: 03/07/2003	Topotype: ME-SA
Species: not known	Genotype/strain: Im2001
Material used: 10% epith. susp.	Sequence filename: IRN03-39.SEQ
Region sequenced: VP1	Date sequence last updated: 18/03/2004
RT-PCR primers: O-1C272F/NK61; O-1C244F/NK61; O-1C283F-NK61	Total no. of comparisons: 1388
No. of Nt determined: 631	
No. of ambiguities: 2	
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/IRN/38/2003	IRN03-38	605	605	2	100.00	0.00
2	O/IRN/4/2003	IRN03-04	629	625	4	99.36	0.64
3	O/IRN/6/2003	IRN03-06	630	624	3	99.05	0.95
4	O/IRN/8/2003	IRN03-08	631	624	2	98.89	1.11
5	O/IRN/27/2003	IRN03-27	625	618	2	98.88	1.12
6	O/IRN/18/2001	IRN01-18	424	418	12	98.58	1.42
7	O/UAE/2/2003	UAE03-02	549	541	3	98.54	1.46
8	O/IRN/28/2003	IRN03-28	261	257	0	98.47	1.53
9	O/IRN/15/2003	IRN03-15	628	618	5	98.41	1.59
10	O/UAE/3/2003	UAE03-03	541	532	2	98.34	1.66

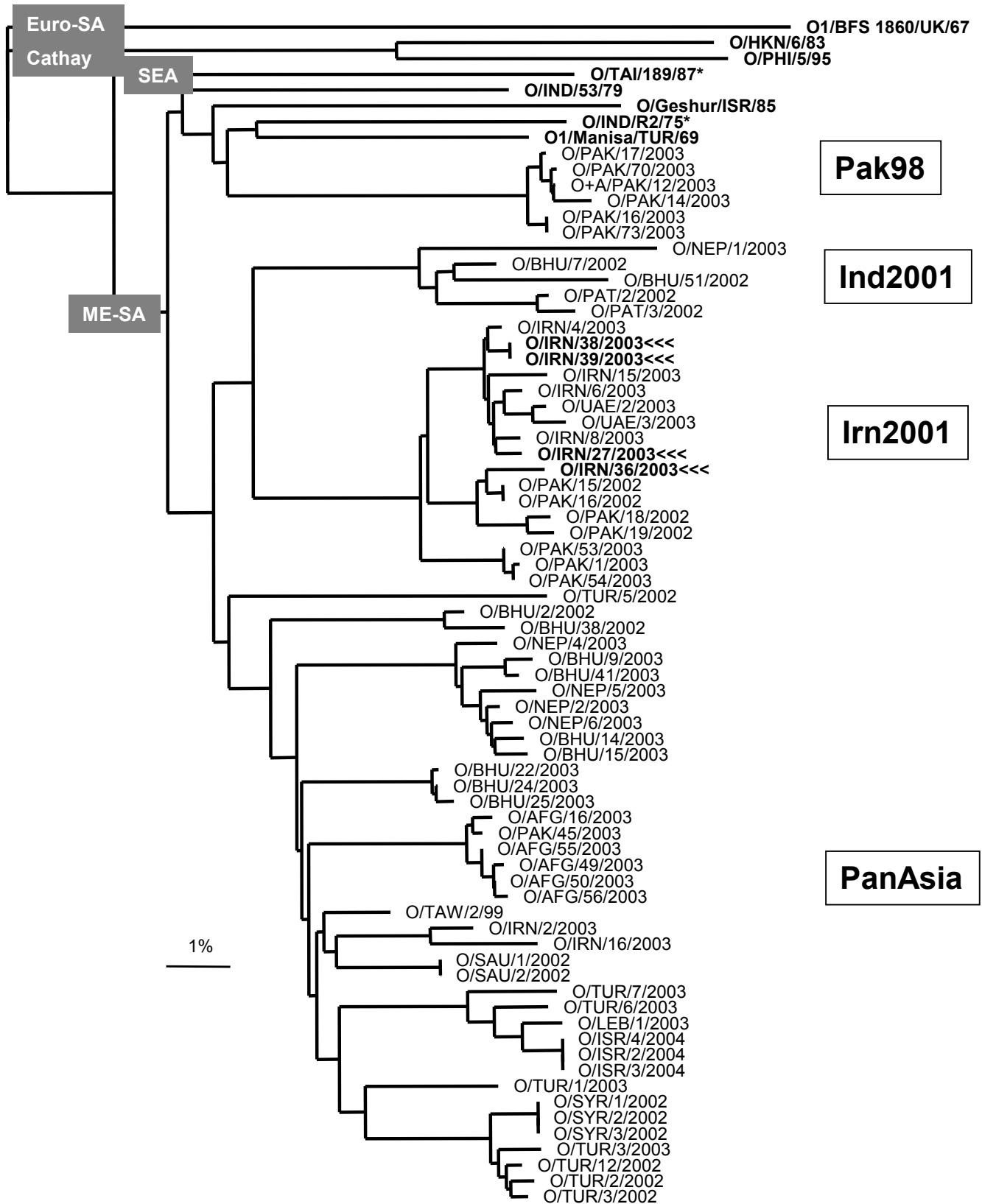
Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TAW/2/99	TAW99-02	631	577	2	91.44	8.56
2	O/IND/53/79	IND79A53	631	569	2	90.17	9.83
3	O1/Manisa/TUR/69	TUR69--E	631	564	2	89.38	10.62
4	O/IND/R2/75*	IND75--A	631	559	2	88.59	11.41
5	O/ISR/1/88	ISR88-01	186	163	6	87.63	12.37
6	O/MOR/1/91	MOR91-01	200	174	4	87.00	13.00
7	O/TAI/189/87*	TAI87-AC	631	546	2	86.53	13.47
8	O1/BFS 1860/UK/67	UKG67--A	631	513	2	81.30	18.70
9	O/HKN/6/83	HKN83-06	629	510	4	81.08	18.92
10	O/PHI/5/95	PHI95-05	508	407	8	80.12	19.88

nt, nucleotides

*, not a WRLFMD reference number

Report on: O IRAN 2003



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

* not a WRLFMD ref. no.