

Serotype: O
WRL Ref No: KUW/1/2008
Sender Ref: Mortada 1
Date collected: 03/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-01.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/10/2008	KUW08-10	639	639	0	100	0
2	O/KUW/2/2008	KUW08-02	639	639	0	100	0
3	O/KUW/6/2008	KUW08-06	639	639	0	100	0
4	O/KUW/7/2008	KUW08-07	639	639	0	100	0
5	O/KUW/8/2008	KUW08-08	639	639	0	100	0
6	O/IRN/27/2007	IRN07-27	639	636	0	99.53	0.47
7	O/KUW/3/2008	KUW08-03	639	634	0	99.22	0.78
8	O/KUW/4/2008	KUW08-04	639	634	0	99.22	0.78
9	O/KUW/5/2008	KUW08-05	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	633	0	99.06	0.94

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	569	0	89.05	10.95
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75* [AF204276]	IND75--A	639	565	0	88.42	11.58
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	554	0	86.7	13.3
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	552	0	86.38	13.62
7	O/MOR/1/91	MOR91-01	639	550	0	86.07	13.93
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	527	0	82.47	17.53
9	O/HKN/6/83	HKN83-06	637	519	2	81.48	18.52
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	513	0	80.28	19.72

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/2/2008
Sender Ref: Mortada 2
Date collected: 03/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-02.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/1/2008	KUW08-01	639	639	0	100	0
2	O/KUW/10/2008	KUW08-10	639	639	0	100	0
3	O/KUW/6/2008	KUW08-06	639	639	0	100	0
4	O/KUW/7/2008	KUW08-07	639	639	0	100	0
5	O/KUW/8/2008	KUW08-08	639	639	0	100	0
6	O/IRN/27/2007	IRN07-27	639	636	0	99.53	0.47
7	O/KUW/3/2008	KUW08-03	639	634	0	99.22	0.78
8	O/KUW/4/2008	KUW08-04	639	634	0	99.22	0.78
9	O/KUW/5/2008	KUW08-05	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	633	0	99.06	0.94

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	569	0	89.05	10.95
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75* [AF204276]	IND75--A	639	565	0	88.42	11.58
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	554	0	86.7	13.3
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	552	0	86.38	13.62
7	O/MOR/1/91	MOR91-01	639	550	0	86.07	13.93
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	527	0	82.47	17.53
9	O/HKN/6/83	HKN83-06	637	519	2	81.48	18.52
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	513	0	80.28	19.72

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/3/2008
Sender Ref: Hajraf 3
Date collected: 20/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-03.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/4/2008	KUW08-04	639	639	0	100	0
2	O/KUW/5/2008	KUW08-05	639	639	0	100	0
3	O/IRN/27/2007	IRN07-27	639	635	0	99.37	0.63
4	O/KUW/1/2008	KUW08-01	639	634	0	99.22	0.78
5	O/KUW/10/2008	KUW08-10	639	634	0	99.22	0.78
6	O/KUW/2/2008	KUW08-02	639	634	0	99.22	0.78
7	O/KUW/6/2008	KUW08-06	639	634	0	99.22	0.78
8	O/KUW/7/2008	KUW08-07	639	634	0	99.22	0.78
9	O/KUW/8/2008	KUW08-08	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	630	0	98.59	1.41

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	596	0	93.27	6.73
2	O/IND/53/79 [AF292107]	IND79A53	639	566	0	88.58	11.42
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	566	0	88.58	11.42
4	O/IND/R2/75* [AF204276]	IND75--A	639	562	0	87.95	12.05
5	O/TAI/189/87* [TRRL]	TAI87-AC	639	553	0	86.54	13.46
6	O/ISR/2/88 (DQ164899)	ISR88-02	639	551	0	86.23	13.77
7	O/MOR/1/91	MOR91-01	639	547	0	85.6	14.4
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	524	0	82	18
9	O/HKN/6/83	HKN83-06	637	516	2	81	19
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	512	0	80.13	19.87

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/4/2008
Sender Ref: Hajraf 4
Date collected: 20/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-04.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/3/2008	KUW08-03	639	639	0	100	0
2	O/KUW/5/2008	KUW08-05	639	639	0	100	0
3	O/IRN/27/2007	IRN07-27	639	635	0	99.37	0.63
4	O/KUW/1/2008	KUW08-01	639	634	0	99.22	0.78
5	O/KUW/10/2008	KUW08-10	639	634	0	99.22	0.78
6	O/KUW/2/2008	KUW08-02	639	634	0	99.22	0.78
7	O/KUW/6/2008	KUW08-06	639	634	0	99.22	0.78
8	O/KUW/7/2008	KUW08-07	639	634	0	99.22	0.78
9	O/KUW/8/2008	KUW08-08	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	630	0	98.59	1.41

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	596	0	93.27	6.73
2	O/IND/53/79 [AF292107]	IND79A53	639	566	0	88.58	11.42
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	566	0	88.58	11.42
4	O/IND/R2/75* [AF204276]	IND75--A	639	562	0	87.95	12.05
5	O/TAI/189/87* [TRRL]	TAI87-AC	639	553	0	86.54	13.46
6	O/ISR/2/88 (DQ164899)	ISR88-02	639	551	0	86.23	13.77
7	O/MOR/1/91	MOR91-01	639	547	0	85.6	14.4
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	524	0	82	18
9	O/HKN/6/83	HKN83-06	637	516	2	81	19
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	512	0	80.13	19.87

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/5/2008
Sender Ref: Hajraf 5
Date collected: 20/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-05.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/3/2008	KUW08-03	639	639	0	100	0
2	O/KUW/4/2008	KUW08-04	639	639	0	100	0
3	O/IRN/27/2007	IRN07-27	639	635	0	99.37	0.63
4	O/KUW/1/2008	KUW08-01	639	634	0	99.22	0.78
5	O/KUW/10/2008	KUW08-10	639	634	0	99.22	0.78
6	O/KUW/2/2008	KUW08-02	639	634	0	99.22	0.78
7	O/KUW/6/2008	KUW08-06	639	634	0	99.22	0.78
8	O/KUW/7/2008	KUW08-07	639	634	0	99.22	0.78
9	O/KUW/8/2008	KUW08-08	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	630	0	98.59	1.41

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	596	0	93.27	6.73
2	O/IND/53/79 [AF292107]	IND79A53	639	566	0	88.58	11.42
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	566	0	88.58	11.42
4	O/IND/R2/75* [AF204276]	IND75--A	639	562	0	87.95	12.05
5	O/TAI/189/87* [TRRL]	TAI87-AC	639	553	0	86.54	13.46
6	O/ISR/2/88 (DQ164899)	ISR88-02	639	551	0	86.23	13.77
7	O/MOR/1/91	MOR91-01	639	547	0	85.6	14.4
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	524	0	82	18
9	O/HKN/6/83	HKN83-06	637	516	2	81	19
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	512	0	80.13	19.87

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/6/2008
Sender Ref: Abdel Razaq 6
Date collected: 24/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-06.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/1/2008	KUW08-01	639	639	0	100	0
2	O/KUW/10/2008	KUW08-10	639	639	0	100	0
3	O/KUW/2/2008	KUW08-02	639	639	0	100	0
4	O/KUW/7/2008	KUW08-07	639	639	0	100	0
5	O/KUW/8/2008	KUW08-08	639	639	0	100	0
6	O/IRN/27/2007	IRN07-27	639	636	0	99.53	0.47
7	O/KUW/3/2008	KUW08-03	639	634	0	99.22	0.78
8	O/KUW/4/2008	KUW08-04	639	634	0	99.22	0.78
9	O/KUW/5/2008	KUW08-05	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	633	0	99.06	0.94

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	569	0	89.05	10.95
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75* [AF204276]	IND75--A	639	565	0	88.42	11.58
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	554	0	86.7	13.3
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	552	0	86.38	13.62
7	O/MOR/1/91	MOR91-01	639	550	0	86.07	13.93
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	527	0	82.47	17.53
9	O/HKN/6/83	HKN83-06	637	519	2	81.48	18.52
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	513	0	80.28	19.72

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/7/2008
Sender Ref: Abdel Razaq 7
Date collected: 24/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-07.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/1/2008	KUW08-01	639	639	0	100	0
2	O/KUW/10/2008	KUW08-10	639	639	0	100	0
3	O/KUW/2/2008	KUW08-02	639	639	0	100	0
4	O/KUW/6/2008	KUW08-06	639	639	0	100	0
5	O/KUW/8/2008	KUW08-08	639	639	0	100	0
6	O/IRN/27/2007	IRN07-27	639	636	0	99.53	0.47
7	O/KUW/3/2008	KUW08-03	639	634	0	99.22	0.78
8	O/KUW/4/2008	KUW08-04	639	634	0	99.22	0.78
9	O/KUW/5/2008	KUW08-05	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	633	0	99.06	0.94

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	569	0	89.05	10.95
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75* [AF204276]	IND75--A	639	565	0	88.42	11.58
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	554	0	86.7	13.3
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	552	0	86.38	13.62
7	O/MOR/1/91	MOR91-01	639	550	0	86.07	13.93
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	527	0	82.47	17.53
9	O/HKN/6/83	HKN83-06	637	519	2	81.48	18.52
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	513	0	80.28	19.72

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/8/2008
Sender Ref: Abdel Razaq 8
Date collected: 24/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-08.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/1/2008	KUW08-01	639	639	0	100	0
2	O/KUW/10/2008	KUW08-10	639	639	0	100	0
3	O/KUW/2/2008	KUW08-02	639	639	0	100	0
4	O/KUW/6/2008	KUW08-06	639	639	0	100	0
5	O/KUW/7/2008	KUW08-07	639	639	0	100	0
6	O/IRN/27/2007	IRN07-27	639	636	0	99.53	0.47
7	O/KUW/3/2008	KUW08-03	639	634	0	99.22	0.78
8	O/KUW/4/2008	KUW08-04	639	634	0	99.22	0.78
9	O/KUW/5/2008	KUW08-05	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	633	0	99.06	0.94

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	569	0	89.05	10.95
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75* [AF204276]	IND75--A	639	565	0	88.42	11.58
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	554	0	86.7	13.3
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	552	0	86.38	13.62
7	O/MOR/1/91	MOR91-01	639	550	0	86.07	13.93
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	527	0	82.47	17.53
9	O/HKN/6/83	HKN83-06	637	519	2	81.48	18.52
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	513	0	80.28	19.72

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/9/2008
Sender Ref: Abdel Razaq 9
Date collected: 24/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-09.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/TUR/14/2007	TUR07-14	639	632	0	98.9	1.1
2	O/IRN/39/2006	IRN06-39	639	631	0	98.75	1.25
3	O/JOR/6/2006	JOR06-06	639	631	0	98.75	1.25
4	O/TUR/4/2007	TUR07-04	639	631	0	98.75	1.25
5	O/IRN/12/2006	IRN06-12	639	630	0	98.59	1.41
6	O/IRN/30/2007	IRN07-30	639	630	0	98.59	1.41
7	O/TUR/1/2007	TUR07-01	639	630	0	98.59	1.41
8	O/IRN/10/2006	IRN06-10	639	629	0	98.44	1.56
9	O/IRN/17/2006	IRN06-17	639	629	0	98.44	1.56
10	O/IRN/19/2006	IRN06-19	639	629	0	98.44	1.56

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	567	0	88.73	11.27
3	O/IND/R2/75* [AF204276]	IND75--A	639	566	0	88.58	11.42
4	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	558	0	87.32	12.68
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	556	0	87.01	12.99
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	554	0	86.7	13.3
7	O/MOR/1/91	MOR91-01	639	551	0	86.23	13.77
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	520	0	81.38	18.62
9	O/HKN/6/83	HKN83-06	637	510	2	80.06	19.94
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	508	0	79.5	20.5

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O
WRL Ref No: KUW/10/2008
Sender Ref: Abdel Razaq 10
Date collected: 24/01/2008
Date received by WRLFMD: 15/02/2008
Date received for sequencing: 27/02/2008
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: 07/03/2008
Topotype: ME-SA
Genotype/strain: PanAsia 2
Sequence filename: KUW08-10.SEQ
Date sequence last updated: 06/03/2008
Total no. of comparisons: 1715
Min. no. of nt for comparison: 300
Total turn-around time: 21 days
Sequencing time: 9 days

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	O/KUW/1/2008	KUW08-01	639	639	0	100	0
2	O/KUW/2/2008	KUW08-02	639	639	0	100	0
3	O/KUW/6/2008	KUW08-06	639	639	0	100	0
4	O/KUW/7/2008	KUW08-07	639	639	0	100	0
5	O/KUW/8/2008	KUW08-08	639	639	0	100	0
6	O/IRN/27/2007	IRN07-27	639	636	0	99.53	0.47
7	O/KUW/3/2008	KUW08-03	639	634	0	99.22	0.78
8	O/KUW/4/2008	KUW08-04	639	634	0	99.22	0.78
9	O/KUW/5/2008	KUW08-05	639	634	0	99.22	0.78
10	O/IRN/31/2007	IRN07-31	639	633	0	99.06	0.94

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	599	0	93.74	6.26
2	O/IND/53/79 [AF292107]	IND79A53	639	569	0	89.05	10.95
3	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	569	0	89.05	10.95
4	O/IND/R2/75* [AF204276]	IND75--A	639	565	0	88.42	11.58
5	O/ISR/2/88 (DQ164899)	ISR88-02	639	554	0	86.7	13.3
6	O/TAI/189/87* [TRRL]	TAI87-AC	639	552	0	86.38	13.62
7	O/MOR/1/91	MOR91-01	639	550	0	86.07	13.93
8	O/PHI/5/95 (DQ164946)	PHI95-05	639	527	0	82.47	17.53
9	O/HKN/6/83	HKN83-06	637	519	2	81.48	18.52
10	O1/BFS 1860/UK/67 (J02185)	UKG67--A	639	513	0	80.28	19.72

nt, nucleotides

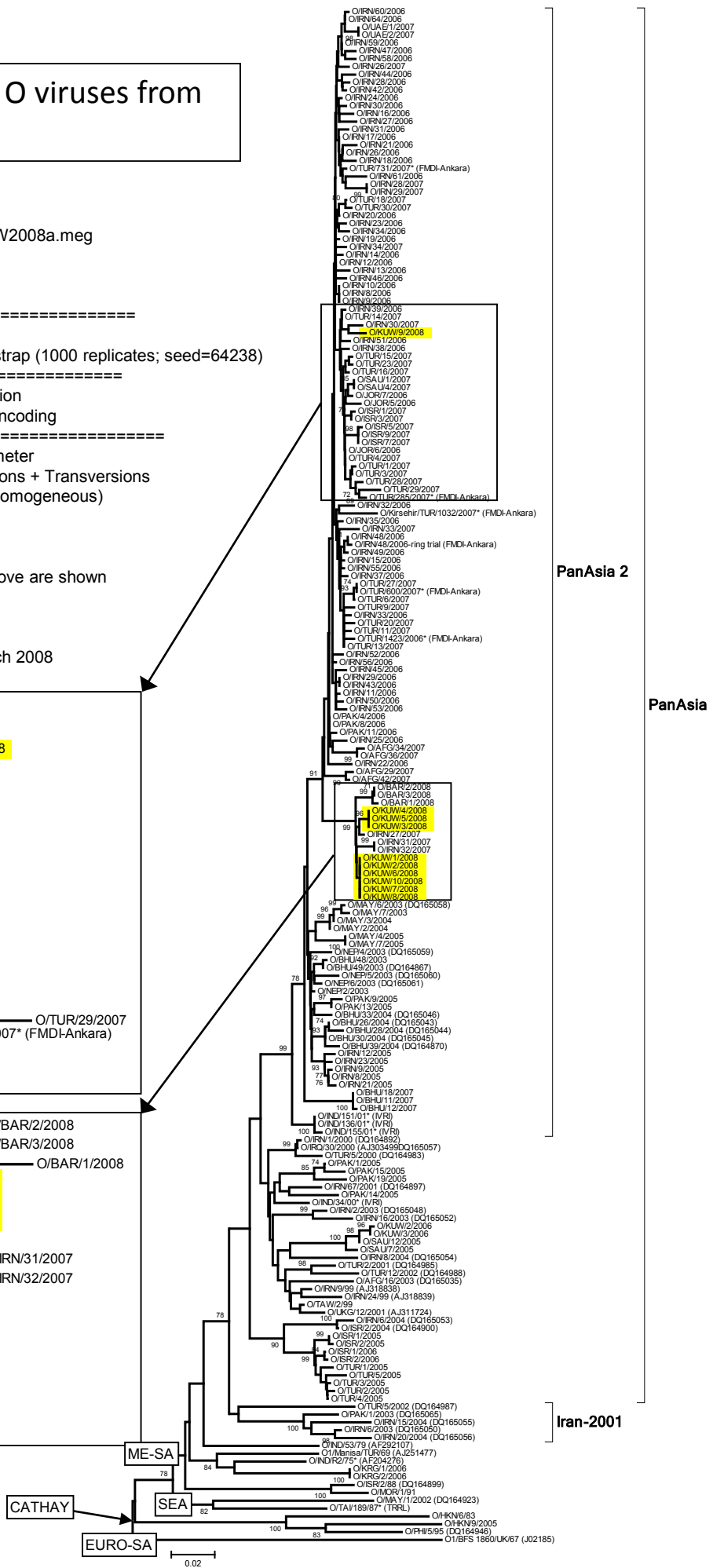
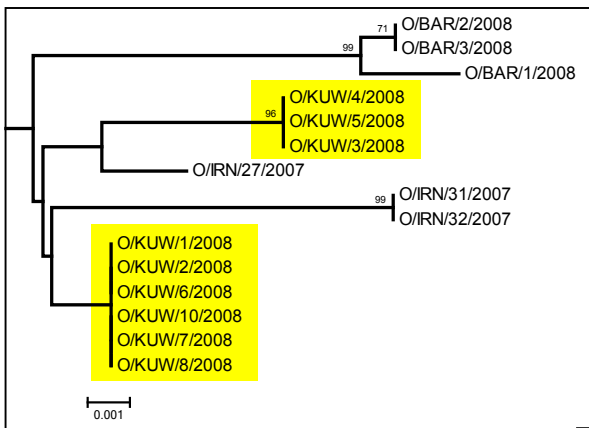
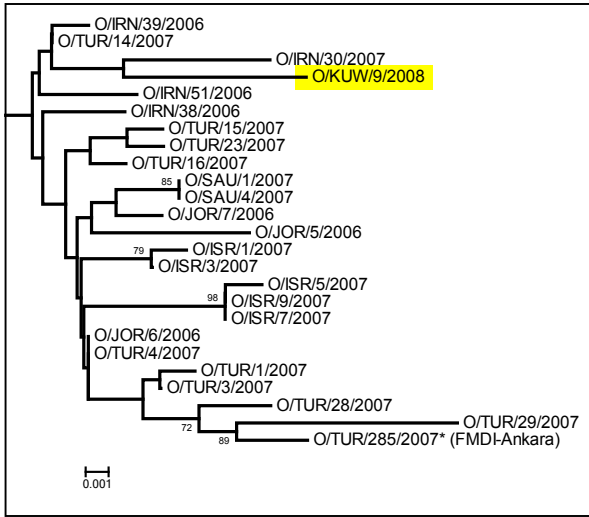
*, not a WRLFMD reference number

Report on FMD type O viruses from Kuwait in 2008

Software: MEGA 4
 No. of Taxa : 196
 Data File : n:\evd\meg\db\fmdiv\o\KUW2008a.meg
 Data Title : Kuwait 2008
 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

* , not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 7 March 2008



PanAsia 2

PanAsia

Iran-2001

ME-SA

CATHAY

EURO-SA

0.02