

Serotype: O	Report date: 16/09/2008
WRL Ref No: LAO/1/2007	Reported by: N.J. Knowles
Sender Ref: LAO 20/07 R3B1	Checked by: D.P. King
Date collected: 24/08/2007	
Date received by WRLFMD: 24/07/2008	Topotype: SEA
Date received for sequencing: 15/08/2008	Genotype/strain: Mya98
Species: Buffalo	Sequence filename: LAO07-01.SEQ
Material used: LK3 BHK1 BTy1	Date sequence last updated: 08/09/2008
Region sequenced: VP1	Total no. of comparisons: 1790
RT-PCR primers: O-1C244F/EUR-2B52R;	Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R	Total turn-around time: 54 days
No. of Nt determined: 639	Sequencing time: 32 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/7/2007	MAY07-07	639	637	0	99.69	0.31
3	O/TAI/7/2007	TAI07-07	639	637	0	99.69	0.31
4	O/MAY/6/2007	MAY07-06	639	636	0	99.53	0.47
5	O/TAI/14/2007	TAI07-14	639	636	0	99.53	0.47
6	O/TAI/9/2007	TAI07-09	639	636	0	99.53	0.47
7	O/MAY/5/2007	MAY07-05	639	635	0	99.37	0.63
8	O/MAY/9/2007	MAY07-09	639	635	0	99.37	0.63
9	O/TAI/12/2007	TAI07-12	639	635	0	99.37	0.63
10	O/TAI/6/2007	TAI07-06	639	635	0	99.37	0.63

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 (AJ294927)	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 (AJ294919)	HKN83-06	637	494	2	77.55	22.45

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 16/09/2008
WRL Ref No: LAO/2/2007	Reported by: N.J. Knowles
Sender Ref: LAO 24/07 R1B1	Checked by: D.P. King
Date collected: 19/10/2007	
Date received by WRLFMD: 24/07/2008	Topotype: SEA
Date received for sequencing: 15/08/2008	Genotype/strain: Mya98
Species: Buffalo	Sequence filename: LAO07-02.SEQ
Material used: LK1 BHK1 BTy1	Date sequence last updated: 08/09/2008
Region sequenced: VP1	Total no. of comparisons: 1790
RT-PCR primers: O-1C244F/EUR-2B52R;	Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R	Total turn-around time: 54 days
No. of Nt determined: 639	Sequencing time: 32 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/LAO/4/2007	LAO07-04	639	639	0	100	0
2	O/TAI/13/2007	TAI07-13	639	637	0	99.69	0.31
3	O/TAI/4/2007	TAI07-04	639	637	0	99.69	0.31
4	O/TAI/5/2007	TAI07-05	639	636	0	99.53	0.47
5	O/LAO/3/2007	LAO07-03	639	635	0	99.37	0.63
6	O/LAO/1/2008	LAO08-01	639	634	0	99.22	0.78
7	O/TAI/10/2005	TAI05-10	639	622	0	97.34	2.66
8	O/TAI/9/2005	TAI05-09	639	622	0	97.34	2.66
9	O/MAY/5/2006	MAY06-05	639	618	0	96.71	3.29
10	O/TAI/8/2007	TAI07-08	639	614	0	96.09	3.91

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	570	0	89.2	10.8
2	O/IND/R2/75* [AF204276]	IND75--A	639	546	0	85.45	14.55
3	O/TAW/2/99 (AJ294927)	TAW99-02	639	543	0	84.98	15.02
4	O/IND/53/79 [AF292107]	IND79A53	639	540	0	84.51	15.49
5	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	538	0	84.19	15.81
6	O/MOR/1/91	MOR91-01	639	533	0	83.41	16.59
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	512	0	80.13	19.87
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	504	0	78.87	21.13
10	O/HKN/6/83 (AJ294919)	HKN83-06	637	496	2	77.86	22.14

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 16/09/2008
WRL Ref No: LAO/3/2007	Reported by: N.J. Knowles
Sender Ref: LAO 26/07 R2B1	Checked by: D.P. King
Date collected: 19/10/2007	
Date received by WRLFMD: 24/07/2008	Topotype: SEA
Date received for sequencing: 15/08/2008	Genotype/strain: Mya98
Species: Cattle	Sequence filename: LAO07-03.SEQ
Material used: LK2 BHK1 BTy1	Date sequence last updated: 08/09/2008
Region sequenced: VP1	Total no. of comparisons: 1790
RT-PCR primers: O-1C244F/EUR-2B52R;	Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R	Total turn-around time: 54 days
No. of Nt determined: 639	Sequencing time: 32 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/LAO/1/2008	LAO08-01	639	636	0	99.53	0.47
2	O/LAO/2/2007	LAO07-02	639	635	0	99.37	0.63
3	O/LAO/4/2007	LAO07-04	639	635	0	99.37	0.63
4	O/TAI/13/2007	TAI07-13	639	635	0	99.37	0.63
5	O/TAI/4/2007	TAI07-04	639	635	0	99.37	0.63
6	O/TAI/5/2007	TAI07-05	639	634	0	99.22	0.78
7	O/TAI/10/2005	TAI05-10	639	620	0	97.03	2.97
8	O/TAI/9/2005	TAI05-09	639	620	0	97.03	2.97
9	O/MAY/5/2006	MAY06-05	639	616	0	96.4	3.6
10	O/TAI/8/2007	TAI07-08	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	570	0	89.2	10.8
2	O/IND/R2/75* [AF204276]	IND75--A	639	544	0	85.13	14.87
3	O/TAW/2/99 (AJ294927)	TAW99-02	639	543	0	84.98	15.02
4	O/IND/53/79 [AF292107]	IND79A53	639	541	0	84.66	15.34
5	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	538	0	84.19	15.81
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	510	0	79.81	20.19
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	502	0	78.56	21.44
10	O/HKN/6/83 (AJ294919)	HKN83-06	637	498	2	78.18	21.82

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 16/09/2008
WRL Ref No: LAO/4/2007	Reported by: N.J. Knowles
Sender Ref: LAO 22/07 R1B1	Checked by: D.P. King
Date collected: 13/12/2007	
Date received by WRLFMD: 24/07/2008	Topotype: SEA
Date received for sequencing: 15/08/2008	Genotype/strain: Mya98
Species: Cattle	Sequence filename: LAO07-04.SEQ
Material used: LK1 BHK1 BTy1	Date sequence last updated: 08/09/2008
Region sequenced: VP1	Total no. of comparisons: 1790
RT-PCR primers: O-1C244F/EUR-2B52R;	Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R	Total turn-around time: 54 days
No. of Nt determined: 639	Sequencing time: 32 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/LAO/2/2007	LAO07-02	639	639	0	100	0
2	O/TAI/13/2007	TAI07-13	639	637	0	99.69	0.31
3	O/TAI/4/2007	TAI07-04	639	637	0	99.69	0.31
4	O/TAI/5/2007	TAI07-05	639	636	0	99.53	0.47
5	O/LAO/3/2007	LAO07-03	639	635	0	99.37	0.63
6	O/LAO/1/2008	LAO08-01	639	634	0	99.22	0.78
7	O/TAI/10/2005	TAI05-10	639	622	0	97.34	2.66
8	O/TAI/9/2005	TAI05-09	639	622	0	97.34	2.66
9	O/MAY/5/2006	MAY06-05	639	618	0	96.71	3.29
10	O/TAI/8/2007	TAI07-08	639	614	0	96.09	3.91

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	570	0	89.2	10.8
2	O/IND/R2/75* [AF204276]	IND75--A	639	546	0	85.45	14.55
3	O/TAW/2/99 (AJ294927)	TAW99-02	639	543	0	84.98	15.02
4	O/IND/53/79 [AF292107]	IND79A53	639	540	0	84.51	15.49
5	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	538	0	84.19	15.81
6	O/MOR/1/91	MOR91-01	639	533	0	83.41	16.59
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	512	0	80.13	19.87
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	504	0	78.87	21.13
10	O/HKN/6/83 (AJ294919)	HKN83-06	637	496	2	77.86	22.14

nt, nucleotides

*, not a WRLFMD reference number

Serotype: O	Report date: 16/09/2008
WRL Ref No: LAO/1/2008	Reported by: N.J. Knowles
Sender Ref: LAO 4/08 R3B1	Checked by: D.P. King
Date collected: 03/01/2008	
Date received by WRLFMD: 24/07/2008	Topotype: SEA
Date received for sequencing: 15/08/2008	Genotype/strain: Mya98
Species: Cattle	Sequence filename: LAO08-01.SEQ
Material used: LK3 BHK1 BTy1	Date sequence last updated: 08/09/2008
Region sequenced: VP1	Total no. of comparisons: 1790
RT-PCR primers: O-1C244F/EUR-2B52R;	Min. no. of nt for comparison: 300
O-1C272F/EUR-2B52R	Total turn-around time: 54 days
No. of Nt determined: 639	Sequencing time: 32 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/LAO/3/2007	LAO07-03	639	636	0	99.53	0.47
2	O/LAO/2/2007	LAO07-02	639	634	0	99.22	0.78
3	O/LAO/4/2007	LAO07-04	639	634	0	99.22	0.78
4	O/TAI/13/2007	TAI07-13	639	634	0	99.22	0.78
5	O/TAI/4/2007	TAI07-04	639	634	0	99.22	0.78
6	O/TAI/5/2007	TAI07-05	639	633	0	99.06	0.94
7	O/TAI/10/2005	TAI05-10	639	619	0	96.87	3.13
8	O/TAI/9/2005	TAI05-09	639	619	0	96.87	3.13
9	O/MAY/5/2006	MAY06-05	639	617	0	96.56	3.44
10	O/TAI/8/2007	TAI07-08	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	571	0	89.36	10.64
2	O/IND/R2/75* [AF204276]	IND75--A	639	546	0	85.45	14.55
3	O/TAW/2/99 (AJ294927)	TAW99-02	639	546	0	85.45	14.55
4	O/IND/53/79 [AF292107]	IND79A53	639	542	0	84.82	15.18
5	O1/Manisa/TUR/69 (AJ251477)	TUR69--E	639	539	0	84.35	15.65
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	509	0	79.66	20.34
9	O/PHI/5/95 (DQ164946)	PHI95-05	639	503	0	78.72	21.28
10	O/HKN/6/83 (AJ294919)	HKN83-06	637	497	2	78.02	21.98

nt, nucleotides

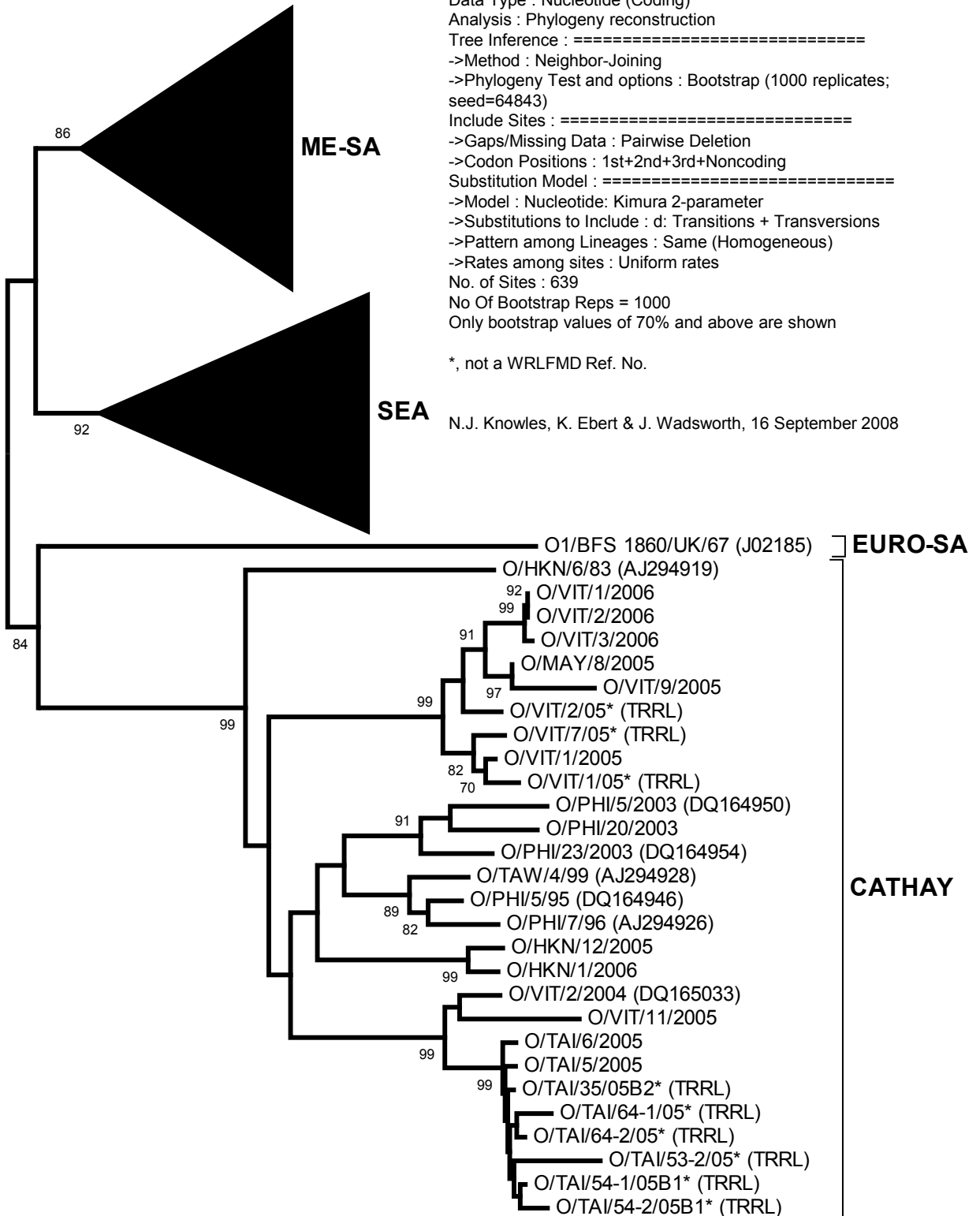
*, not a WRLFMD reference number

Report on FMD O viruses from Thailand and Laos in 2007

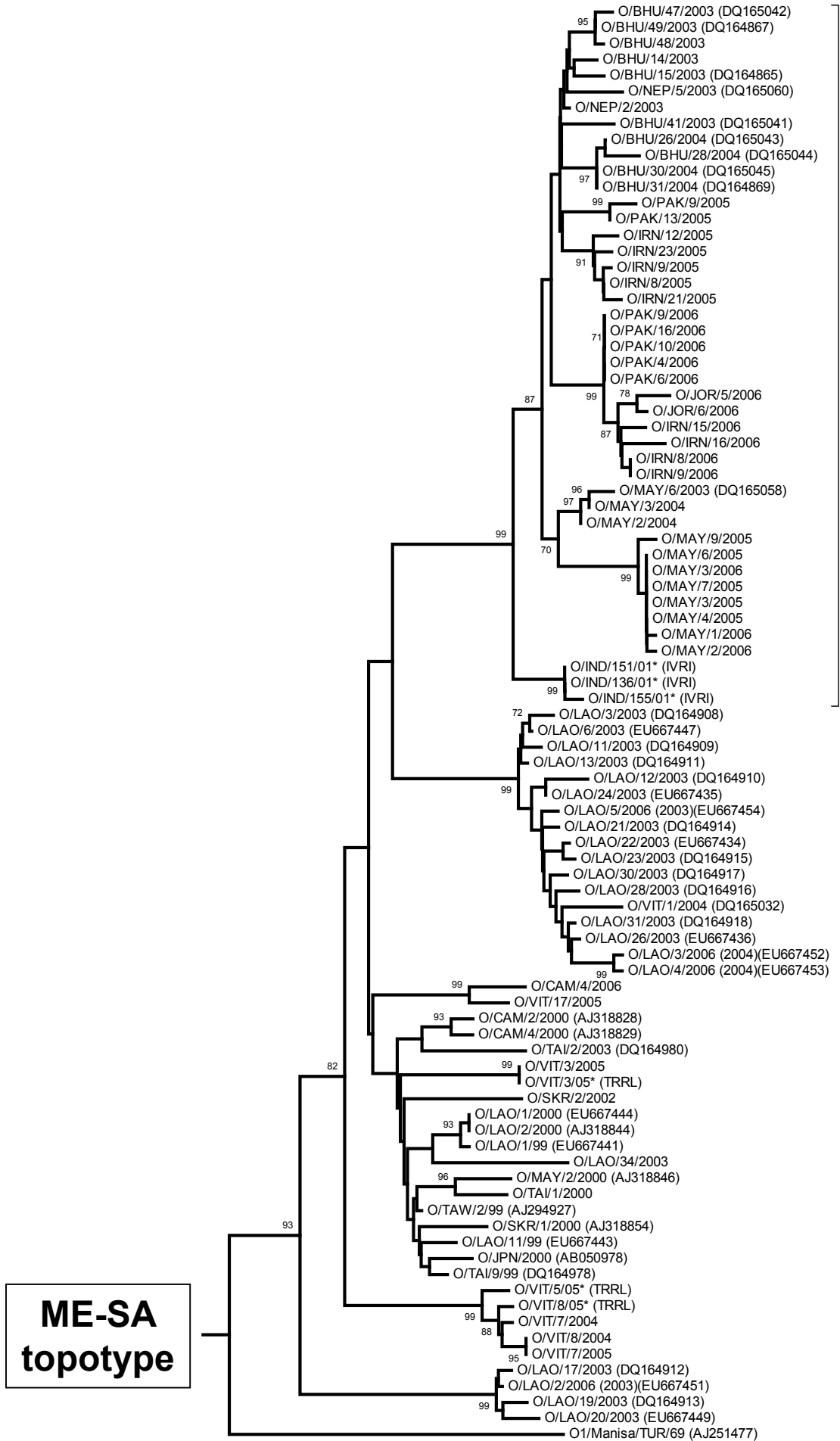
Software: MEGA 4.0
 No. of Taxa : 195
 Data File : n:\evd\meg\db\fmv\o\TAI2007a.meg
 Data Title : Thailand 2007 & Laos 2007-08
 Data Type : Nucleotide (Coding)
 Analysis : Phylogeny reconstruction
 Tree Inference : =====
 ->Method : Neighbor-Joining
 ->Phylogeny Test and options : Bootstrap (1000 replicates;
 seed=64843)
 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, K. Ebert & J. Wadsworth, 16 September 2008



0.02

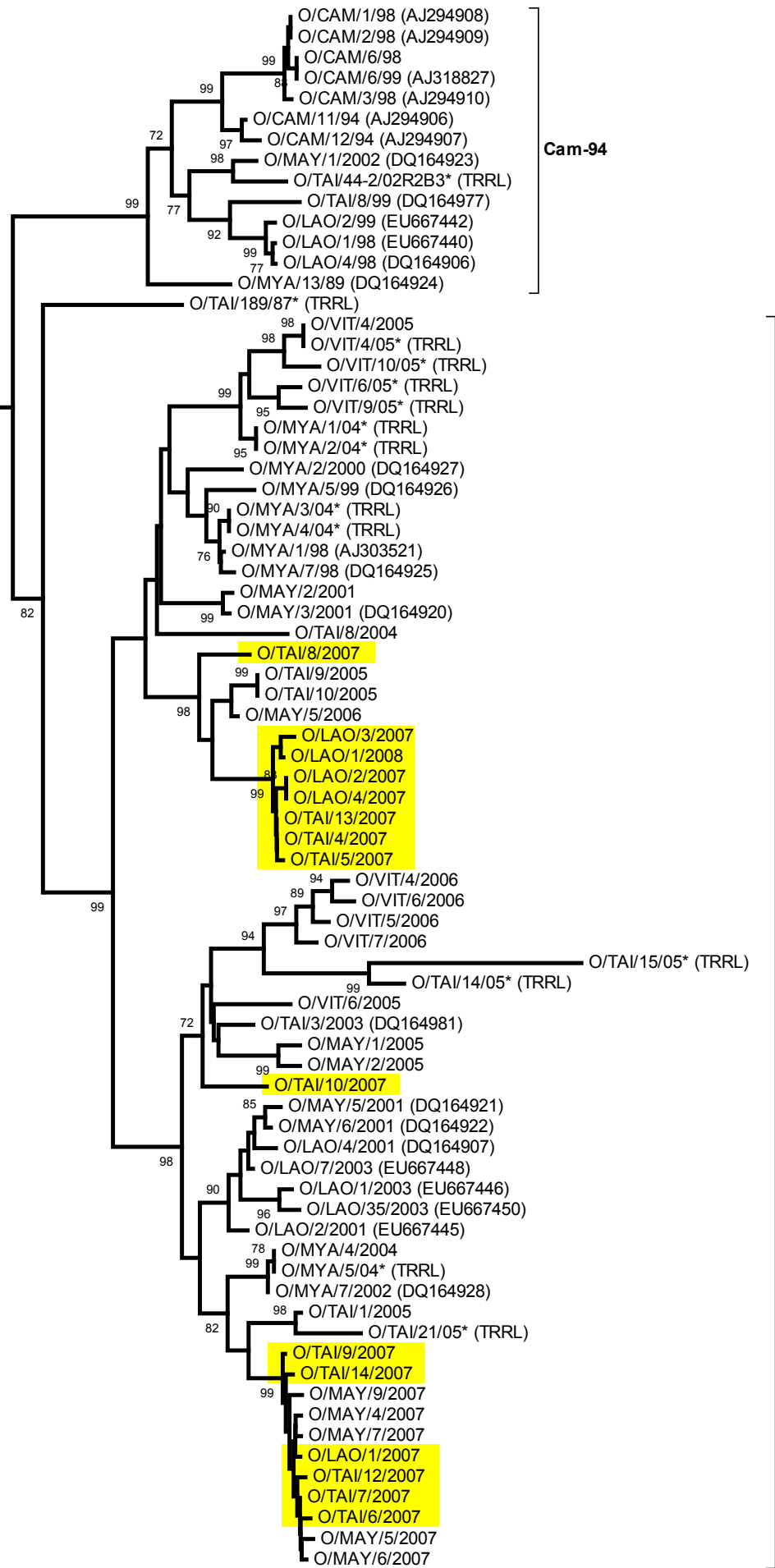


PanAsia-2

**ME-SA
topotype**

0.01

**SEA
topotype**



0.02