

Serotype: A		Report date: 02/11/2006					
WRL Ref No: TAI/2/2005							
Sender Ref: 31-01/05 R3 B1							
Date collected: 13/09/2005							
Date received by WRLFMD: 23/07/2006		Topotype: Asia					
Date received for sequencing: 28/07/2006		Genotype/strain: none designated					
Species: Cattle		Sequence filename: TAI05-02.SEQ					
Material used: LK3 BHK1 BTy1		Date sequence last updated: 06/10/2006					
Region sequenced: VP1		Total no. of comparisons: 738					
RT-PCR primers: A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R		Min. no. of nt for comparison: 300					
No. of Nt determined: 636		Total turn-around time: 102 days					
No. of ambiguities: 0		Sequencing time: 97 days					
Gene length: 636							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/MAY/5/2005	MAY05-05	636	630	0	99.06	0.94
2	A/TAI/7/2005	TAI05-07	636	627	0	98.58	1.42
3	A/TAI/4/2005	TAI05-04	636	626	0	98.43	1.57
4	A/TAI/2/98	TAI98-02	634	601	2	94.79	5.21
5	A/TAI/1/99	TAI99-01	634	600	2	94.64	5.36
6	A/TAI/6/99	TAI99-06	636	600	0	94.34	5.66
7	A/TAI/7/99	TAI99-07	617	581	2	94.17	5.83
8	A/MAY/15/97	MAY97-15	375	353	11	94.13	5.87
9	A/TAI/3/99	TAI99-03	511	480	23	93.93	6.07
10	A/TAI/3/2001	TAI01-03	633	594	3	93.84	6.16
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/2/97	TAI97-02	636	596	0	93.71	6.29
2	A/TAI/118/87*	TAI87-AD	636	575	0	90.41	9.59
3	A/IND/7/82 (1980)	IND82-07	636	534	0	83.96	16.04
4	A/SAU/41/91	SAU91-41	633	529	0	83.57	16.43
5	A/IRN/87	IRN87--M	634	525	2	82.81	17.19
6	A/SAU/23/86	SAU86-23	636	525	0	82.55	17.45
7	A22/IRQ/24/64 (AJ251474)	IRQ64-24	636	523	0	82.23	17.77
8	A/IRN/1/96	IRN96-01	635	518	1	81.57	18.43
9	A/IRN/22/99	IRN99-22	633	516	0	81.52	18.48
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	636	508	0	79.87	20.13
nt, nucleotides							
*, not a WRLFMD reference number							

Serotype: A Report date: 02/11/2006
WRL Ref No: TAI/3/2005
Sender Ref: 33-1/05 R1 B1
Date collected: 13/09/2005
Date received by WRLFMD: 23/07/2006 Topotype: Asia
Date received for sequencing: 28/07/2006 Genotype/strain: none designated
Species: Cattle Sequence filename: TAI05-03.SEQ
Material used: LK1 BHK3 BTy1 Date sequence last updated: 09/10/2006
Region sequenced: VP1 Total no. of comparisons: 736
RT-PCR primers: A-1C562F/EUR-2B52R; Min. no. of nt for comparison: 300
A-1C612F/EUR-2B52R Total turn-around time: 102 days
No. of Nt determined: 633 Sequencing time: 97 days
No. of ambiguities: 0
Gene length: 633

Comments: This virus has a spontaneous codon deletion in the VP1 G-H loop at position 154.

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/11/2003	TAI03-11	631	616	2	97.62	2.38
2	A/MAY/4/2003	MAY03-04	633	617	0	97.47	2.53
3	A/TAI/12/2003	TAI03-12	633	617	0	97.47	2.53
4	A/LAO/1/2006	LAO06-01	633	616	0	97.31	2.69
5	A/LAO/36/2003	LAO03-36	633	616	0	97.31	2.69
6	A/TAI/11/04* [TRRL]	TAI04-AD	633	616	0	97.31	2.69
7	A/TAI/2/04R2* [TRRL]	TAI04-AA	633	615	0	97.16	2.84
8	A/TAI/7/2003	TAI03-07	633	615	0	97.16	2.84
9	A/VIT/10/2004	VIT04-10	633	615	0	97.16	2.84
10	A/TAI/5/2003	TAI03-05	621	603	0	97.1	2.9

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/2/97	TAI97-02	633	582	0	91.94	8.06
2	A/TAI/118/87*	TAI87-AD	633	557	0	87.99	12.01
3	A/IND/7/82 (1980)	IND82-07	633	529	0	83.57	16.43
4	A/SAU/41/91	SAU91-41	630	515	0	81.75	18.25
5	A/IRN/87	IRN87--M	631	513	2	81.3	18.7
6	A/SAU/23/86	SAU86-23	633	514	0	81.2	18.8
7	A/IRN/1/96	IRN96-01	632	510	1	80.7	19.3
8	A22/IRQ/24/64 (AJ251474)	IRQ64-24	633	510	0	80.57	19.43
9	A/IRN/22/99	IRN99-22	630	500	0	79.37	20.63
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	633	501	0	79.15	20.85

nt, nucleotides

*, not a WRLFMD reference number

Serotype: A Report date: 02/11/2006
WRL Ref No: TAI/4/2005
Sender Ref: 46-1/05 R2 B2
Date collected: 07/11/2005
Date received by WRLFMD: 23/07/2006 Topotype: Asia
Date received for sequencing: 28/07/2006 Genotype/strain: none designated
Species: Cattle Sequence filename: TAI05-04.SEQ
Material used: LK2 BHK2 BTy1 Date sequence last updated: 06/10/2006
Region sequenced: VP1 Total no. of comparisons: 738
RT-PCR primers: A-1C562F/EUR-2B52R; Min. no. of nt for comparison: 300
A-1C612F/EUR-2B52R Total turn-around time: 102 days
No. of Nt determined: 636 Sequencing time: 97 days
No. of ambiguities: 0
Gene length: 636

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/2/2005	TAI05-02	636	626	0	98.43	1.57
2	A/MAY/5/2005	MAY05-05	636	624	0	98.11	1.89
3	A/TAI/7/2005	TAI05-07	636	621	0	97.64	2.36
4	A/TAI/2/98	TAI98-02	634	597	2	94.16	5.84
5	A/TAI/1/99	TAI99-01	634	596	2	94.01	5.99
6	A/TAI/6/99	TAI99-06	636	596	0	93.71	6.29
7	A/TAI/7/99	TAI99-07	617	578	2	93.68	6.32
8	A/TAI/3/2001	TAI01-03	633	592	3	93.52	6.48
9	A/TAI/4/2000	TAI00-04	607	566	23	93.25	6.75
10	A/TAI/3/99	TAI99-03	511	476	23	93.15	6.85

Relationships to Reference Virus Strains

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/2/97	TAI97-02	636	592	0	93.08	6.92
2	A/TAI/118/87*	TAI87-AD	636	571	0	89.78	10.22
3	A/IND/7/82 (1980)	IND82-07	636	535	0	84.12	15.88
4	A/SAU/41/91	SAU91-41	633	528	0	83.41	16.59
5	A/IRN/87	IRN87--M	634	525	2	82.81	17.19
6	A/SAU/23/86	SAU86-23	636	521	0	81.92	18.08
7	A22/IRQ/24/64 (AJ251474)	IRQ64-24	636	518	0	81.45	18.55
8	A/IRN/1/96	IRN96-01	635	517	1	81.42	18.58
9	A/IRN/22/99	IRN99-22	633	514	0	81.2	18.8
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	636	508	0	79.87	20.13

nt, nucleotides

*, not a WRLFMD reference number

Serotype: A Report date: 02/11/2006
WRL Ref No: TAI/7/2005
Sender Ref: 65/05 B3
Date collected: 30/11/2005
Date received by WRLFMD: 23/07/2006 Topotype: Asia
Date received for sequencing: 28/07/2006 Genotype/strain: none designated
Species: Cattle Sequence filename: TAI05-07.SEQ
Material used: BHK3 BTy1 Date sequence last updated: 06/10/2006
Region sequenced: VP1 Total no. of comparisons: 738
RT-PCR primers: A-1C562F/EUR-2B52R; Min. no. of nt for comparison: 300
A-1C612F/EUR-2B52R Total turn-around time: 102 days
No. of Nt determined: 636 Sequencing time: 97 days
No. of ambiguities: 0
Gene length: 636

Comments:

Ten Most Closely Related Viruses

Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/MAY/5/2005	MAY05-05	636	627	0	98.58	1.42
2	A/TAI/2/2005	TAI05-02	636	627	0	98.58	1.42
3	A/TAI/4/2005	TAI05-04	636	621	0	97.64	2.36
4	A/TAI/2/98	TAI98-02	634	599	2	94.48	5.52
5	A/TAI/1/99	TAI99-01	634	598	2	94.32	5.68
6	A/TAI/6/99	TAI99-06	636	598	0	94.03	5.97
7	A/TAI/3/99	TAI99-03	511	479	23	93.74	6.26
8	A/TAI/7/99	TAI99-07	617	578	2	93.68	6.32
9	A/TAI/3/2001	TAI01-03	633	592	3	93.52	6.48
10	A/TAI/4/2000	TAI00-04	607	567	23	93.41	6.59

Relationships to Reference Virus Strains

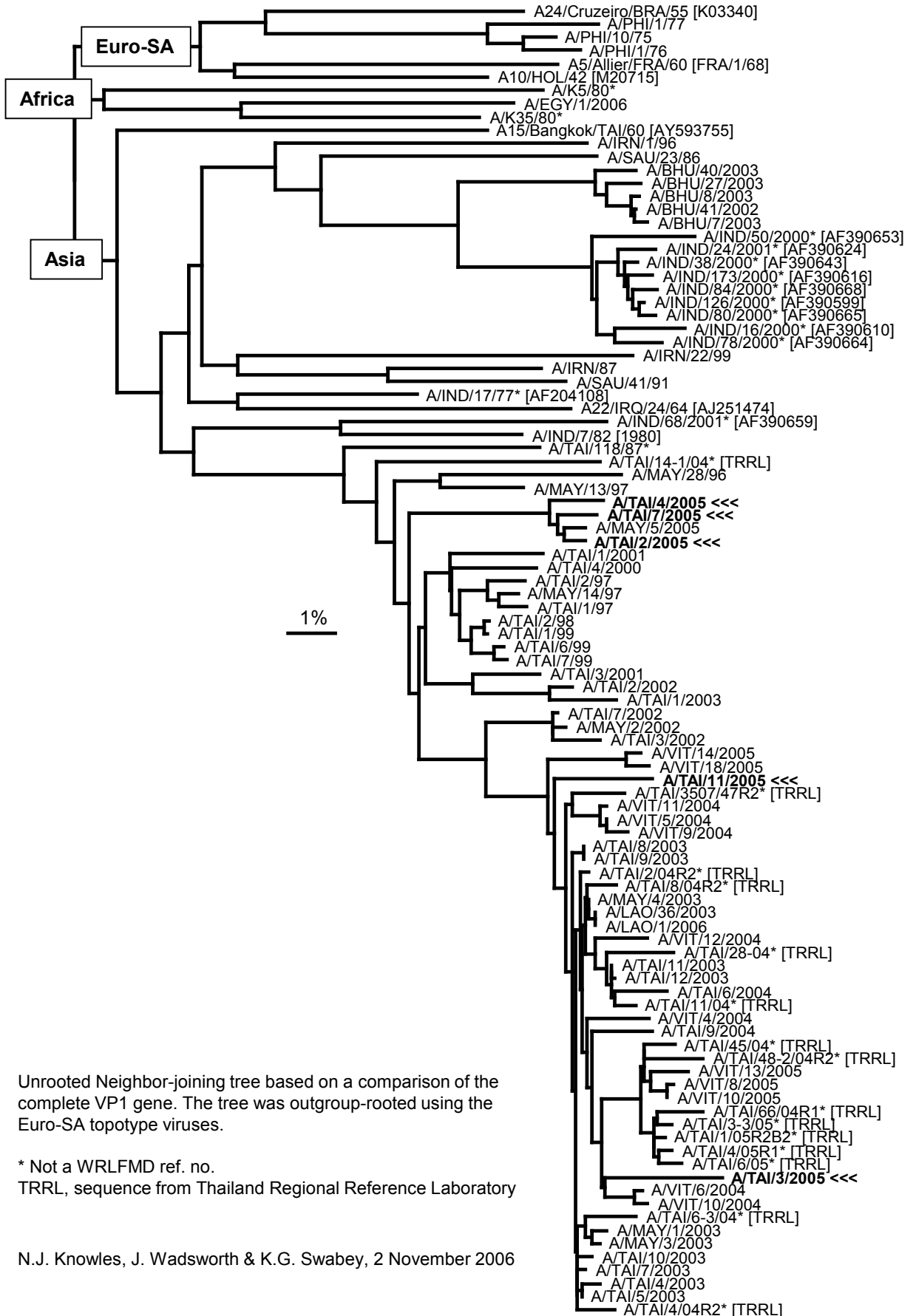
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/2/97	TAI97-02	636	594	0	93.4	6.6
2	A/TAI/118/87*	TAI87-AD	636	575	0	90.41	9.59
3	A/IND/7/82 (1980)	IND82-07	636	535	0	84.12	15.88
4	A/SAU/41/91	SAU91-41	633	529	0	83.57	16.43
5	A/SAU/23/86	SAU86-23	636	527	0	82.86	17.14
6	A22/IRQ/24/64 (AJ251474)	IRQ64-24	636	526	0	82.7	17.3
7	A/IRN/87	IRN87--M	634	523	2	82.49	17.51
8	A/IRN/1/96	IRN96-01	635	519	1	81.73	18.27
9	A/IRN/22/99	IRN99-22	633	517	0	81.67	18.33
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	636	506	0	79.56	20.44

nt, nucleotides

*, not a WRLFMD reference number

Serotype: A	Report date: 02/11/2006						
WRL Ref No: TAI/11/2005							
Sender Ref: 89/05 R1 B3							
Date collected: 31/12/2005							
Date received by WRLFMD: 23/07/2006	Topotype: Asia						
Date received for sequencing: 28/07/2006	Genotype/strain: none designated						
Species: Cattle	Sequence filename: TAI05-11.SEQ						
Material used: LK1 BHK3 BTy1	Date sequence last updated: 06/10/2006						
Region sequenced: VP1	Total no. of comparisons: 738						
RT-PCR primers: A-1C562F/EUR-2B52R; A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 300						
No. of Nt determined: 636	Total turn-around time: 102 days						
No. of ambiguities: 0	Sequencing time: 97 days						
Gene length: 636							
Comments:							
Ten Most Closely Related Viruses							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/5/2003	TAI03-05	624	608	0	97.44	2.56
2	A/MAY/4/2003	MAY03-04	636	619	0	97.33	2.67
3	A/TAI/8/2003	TAI03-08	631	614	5	97.31	2.69
4	A/TAI/9/2003	TAI03-09	617	600	1	97.24	2.76
5	A/LAO/1/2006	LAO06-01	636	618	0	97.17	2.83
6	A/LAO/36/2003	LAO03-36	636	618	0	97.17	2.83
7	A/TAI/7/2003	TAI03-07	636	618	0	97.17	2.83
8	A/TAI/10/2003	TAI03-10	636	617	0	97.01	2.99
9	A/TAI/2/04R2* [TRRL]	TAI04-AA	636	617	0	97.01	2.99
10	A/TAI/11/2003	TAI03-11	634	615	2	97	3
Relationships to Reference Virus Strains							
Pos.	Virus name	Filename	No. nt compared	No. nt matched	No. of ambiguities	% Identity	% Difference
1	A/TAI/2/97	TAI97-02	636	589	0	92.61	7.39
2	A/TAI/118/87*	TAI87-AD	636	567	0	89.15	10.85
3	A/IND/7/82 (1980)	IND82-07	636	534	0	83.96	16.04
4	A/SAU/41/91	SAU91-41	633	521	0	82.31	17.69
5	A/IRN/87	IRN87--M	634	520	2	82.02	17.98
6	A22/IRQ/24/64 (AJ251474)	IRQ64-24	636	521	0	81.92	18.08
7	A/SAU/23/86	SAU86-23	636	519	0	81.6	18.4
8	A/IRN/1/96	IRN96-01	635	518	1	81.57	18.43
9	A/IRN/22/99	IRN99-22	633	513	0	81.04	18.96
10	A24/Cruzeiro/BRA/55 (AJ251476)	BRA55--C	636	509	0	80.03	19.97
nt, nucleotides							
*, not a WRLFMD reference number							

Report on FMDV A from Thailand in 2005



Unrooted Neighbor-joining tree based on a comparison of the complete VP1 gene. The tree was outgroup-rooted using the Euro-SA toptotype viruses.

* Not a WRLFMD ref. no.

TRRL, sequence from Thailand Regional Reference Laboratory

N.J. Knowles, J. Wadsworth & K.G. Swabey, 2 November 2006