

# FAO World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD)

## Genotyping Report

Report Date for this Batch: 7 August 2014

FMDV type A

Country: Thailand

Period: 2013-2014

No. of samples: 19

BATCH: WRLFMD/2014/00022



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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/6/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 19/13 R3B3	
Location: Phetchabun Province, Thailand	Topotype: ASIA
Date collected: 17/07/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-06.SEQ
Date received for sequencing: 23/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 16/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 15 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/THA 66-1/10* (TRRL)	TAI10-AA	633	619	0	97.79	2.21	ASIA	Sea-97
2	A/MAY/4/2011	MAY11-04	633	618	0	97.63	2.37	ASIA	Sea-97
3	A/TAI/7/2010	TAI10-07	633	618	0	97.63	2.37	ASIA	Sea-97
4	A/TAI/8/2010	TAI10-08	633	618	0	97.63	2.37	ASIA	Sea-97
5	A/THA 67-3/10* (TRRL)	TAI10-AB	633	618	0	97.63	2.37	ASIA	Sea-97
6	A/THA 69-6/10* (TRRL)	TAI10-AC	633	618	0	97.63	2.37	ASIA	Sea-97
7	A/TAI/1/2011	TAI11-01	633	617	0	97.47	2.53	ASIA	Sea-97
8	A/TAI/3/2011	TAI11-03	633	617	0	97.47	2.53	ASIA	Sea-97
9	A/TAI/3/2012	TAI12-03	633	617	0	97.47	2.53	ASIA	Sea-97
10	A/TAI/4/2012	TAI12-04	633	617	0	97.47	2.53	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	602	0	95.10	4.90	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	584	0	92.26	7.74	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	560	0	88.47	11.53	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	528	0	83.02	16.98	ASIA	A <sub>22</sub>
5	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	526	0	82.70	17.30	ASIA	A15
6	A/TUR/3/2010	TUR10-03	636	525	0	82.55	17.45	ASIA	Iran-05 <sup>KSS-09</sup>
7	A/IRN/2/87 (EF208770)	IRN87-02	633	522	0	82.46	17.54	ASIA	Iran-87
8	A/AFG/10/2010	AFG10-10	636	523	0	82.23	17.77	ASIA	Iran-05 <sup>HER-10</sup>
9	A/IRN/1/2011	IRN11-01	636	523	0	82.23	17.77	ASIA	Iran-05 <sup>FAR-11</sup>
10	A/IRN/78/2009	IRN09-78	636	523	0	82.23	17.77	ASIA	Iran-05 <sup>FAR-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/7/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 21/13 R2B3	
Location: Nakhon Pathom Province, Thailand	Topotype: ASIA
Date collected: 19/07/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-07.SEQ
Date received for sequencing: 23/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 15/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 15 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/9/2013	TAI13-09	636	633	0	99.53	0.47	ASIA	Sea-97
2	A/TAI/8/2013	TAI13-08	636	632	0	99.37	0.63	ASIA	Sea-97
3	A/TAI/2/2013	TAI13-02	633	627	0	99.05	0.95	ASIA	Sea-97
4	A/TAI/3/2013	TAI13-03	633	626	0	98.89	1.11	ASIA	Sea-97
5	A/TAI/4/2013	TAI13-04	633	626	0	98.89	1.11	ASIA	Sea-97
6	A/VIT/3/2013	VIT13-03	633	626	0	98.89	1.11	ASIA	Sea-97
7	A/VIT/1/2013	VIT13-01	633	625	0	98.74	1.26	ASIA	Sea-97
8	A/VIT/4/2013	VIT13-04	633	625	0	98.74	1.26	ASIA	Sea-97
9	A/VIT/5/2013	VIT13-05	633	625	0	98.74	1.26	ASIA	Sea-97
10	A/VIT/6/2013	VIT13-06	633	625	0	98.74	1.26	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	594	0	93.84	6.16	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	574	0	90.68	9.32	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	554	0	87.52	12.48	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	527	0	82.86	17.14	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	524	0	82.78	17.22	ASIA	Iran-87
6	A/IRN/1/2011	IRN11-01	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/IRN/78/2009	IRN09-78	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>FAR-09</sup>
8	A/BAR/6/2008 (FJ755010)	BAR08-06	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>BAR-08</sup>
9	A/IRN/1/96 (EF208771)	IRN96-01	635	517	1	81.42	18.58	ASIA	Iran-96
10	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	516	0	81.13	18.87	ASIA	A15

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/8/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 22-1/13 R4B2	
Location: Nakhon Pathom Province, Thailand	Topotype: ASIA
Date collected: 29/07/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-08.SEQ
Date received for sequencing: 23/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 17/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 15 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2013	TAI13-07	636	632	0	99.37	0.63	ASIA	Sea-97
2	A/TAI/9/2013	TAI13-09	636	631	0	99.21	0.79	ASIA	Sea-97
3	A/TAI/2/2013	TAI13-02	633	625	0	98.74	1.26	ASIA	Sea-97
4	A/TAI/3/2013	TAI13-03	633	624	0	98.58	1.42	ASIA	Sea-97
5	A/TAI/4/2013	TAI13-04	633	624	0	98.58	1.42	ASIA	Sea-97
6	A/VIT/3/2013	VIT13-03	633	624	0	98.58	1.42	ASIA	Sea-97
7	A/VIT/1/2013	VIT13-01	633	623	0	98.42	1.58	ASIA	Sea-97
8	A/VIT/4/2013	VIT13-04	633	623	0	98.42	1.58	ASIA	Sea-97
9	A/VIT/5/2013	VIT13-05	633	623	0	98.42	1.58	ASIA	Sea-97
10	A/VIT/6/2013	VIT13-06	633	623	0	98.42	1.58	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	592	0	93.52	6.48	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	572	0	90.36	9.64	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	552	0	87.20	12.80	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	525	0	82.55	17.45	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	520	0	82.15	17.85	ASIA	Iran-87
6	A/IRN/1/96 (EF208771)	IRN96-01	635	517	1	81.42	18.58	ASIA	Iran-96
7	A/IRN/1/2011	IRN11-01	636	516	0	81.13	18.87	ASIA	Iran-05 <sup>FAR-11</sup>
8	A/IRN/78/2009	IRN09-78	636	516	0	81.13	18.87	ASIA	Iran-05 <sup>FAR-09</sup>
9	A/BAR/6/2008 (FJ755010)	BAR08-06	636	515	0	80.97	19.03	ASIA	Iran-05 <sup>BAR-08</sup>
10	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	514	0	80.82	19.18	ASIA	A15

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/9/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 26-3/13 R3B3	
Location: Kanchanaburi Province, Thailand	Topotype: ASIA
Date collected: 01/08/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-09.SEQ
Date received for sequencing: 23/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 17/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 15 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2013	TAI13-07	636	633	0	99.53	0.47	ASIA	Sea-97
2	A/TAI/8/2013	TAI13-08	636	631	0	99.21	0.79	ASIA	Sea-97
3	A/TAI/2/2013	TAI13-02	633	626	0	98.89	1.11	ASIA	Sea-97
4	A/TAI/3/2013	TAI13-03	633	625	0	98.74	1.26	ASIA	Sea-97
5	A/TAI/4/2013	TAI13-04	633	625	0	98.74	1.26	ASIA	Sea-97
6	A/VIT/3/2013	VIT13-03	633	625	0	98.74	1.26	ASIA	Sea-97
7	A/VIT/1/2013	VIT13-01	633	624	0	98.58	1.42	ASIA	Sea-97
8	A/VIT/4/2013	VIT13-04	633	624	0	98.58	1.42	ASIA	Sea-97
9	A/VIT/5/2013	VIT13-05	633	624	0	98.58	1.42	ASIA	Sea-97
10	A/VIT/6/2013	VIT13-06	633	624	0	98.58	1.42	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	593	0	93.68	6.32	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	573	0	90.52	9.48	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	551	0	87.05	12.95	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	523	0	82.62	17.38	ASIA	Iran-87
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	524	0	82.39	17.61	ASIA	A <sub>22</sub>
6	A/BAR/6/2008 (FJ755010)	BAR08-06	636	517	0	81.29	18.71	ASIA	Iran-05 <sup>BAR-08</sup>
7	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	517	0	81.29	18.71	ASIA	A15
8	A/IRN/1/96 (EF208771)	IRN96-01	635	516	1	81.26	18.74	ASIA	Iran-96
9	A/IRN/1/2011	IRN11-01	636	516	0	81.13	18.87	ASIA	Iran-05 <sup>FAR-11</sup>
10	A/IRN/78/2009	IRN09-78	636	516	0	81.13	18.87	ASIA	Iran-05 <sup>FAR-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/12/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 31-3/13 R1B1	
Location: Lamphun Province, Thailand	Topotype: ASIA
Date collected: 09/10/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-12.SEQ
Date received for sequencing: 01/08/2014	Date sequence last updated: 05/08/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 18/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 6 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/14/2013	TAI13-14	636	636	0	100.00	0.00	ASIA	Sea-97
2	A/TAI/15/2013	TAI13-15	636	636	0	100.00	0.00	ASIA	Sea-97
3	A/TAI/4/2014	TAI14-04	636	635	0	99.84	0.16	ASIA	Sea-97
4	A/TAI/16/2013	TAI13-16	636	633	0	99.53	0.47	ASIA	Sea-97
5	A/VIT/42/2013	VIT13-42	633	628	0	99.21	0.79	ASIA	Sea-97
6	A/VIT/35/2013	VIT13-35	633	626	0	98.89	1.11	ASIA	Sea-97
7	A/VIT/54/2013	VIT13-54	633	626	0	98.89	1.11	ASIA	Sea-97
8	A/VIT/56/2013	VIT13-56	633	626	0	98.89	1.11	ASIA	Sea-97
9	A/TAI/17/2013	TAI13-17	636	628	0	98.74	1.26	ASIA	Sea-97
10	A/TAI/20/2013	TAI13-20	636	628	0	98.74	1.26	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	590	0	93.21	6.79	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	575	0	90.84	9.16	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	559	0	88.31	11.69	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	523	0	82.62	17.38	ASIA	Iran-87
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	524	0	82.39	17.61	ASIA	A <sub>22</sub>
6	A/IRN/1/2011	IRN11-01	636	522	0	82.08	17.92	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/IRN/1/96 (EF208771)	IRN96-01	635	518	1	81.57	18.43	ASIA	Iran-96
8	A/GHA/16/73 (KF561698)	GHA73-16	633	516	0	81.52	18.48	AFRICA	G-VI
9	A/IRN/78/2009	IRN09-78	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>FAR-09</sup>
10	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	518	0	81.45	18.55	AFRICA	G-III

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/13/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 32-1/13 R3B1	
Location: Songkhla Province, Thailand	Topotype: ASIA
Date collected: 12/10/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-13.SEQ
Date received for sequencing: 23/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 17/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 15 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/22/2013	TAI13-22	636	635	0	99.84	0.16	ASIA	Sea-97
2	A/MAY/5/2012	MAY12-05	636	620	0	97.48	2.52	ASIA	Sea-97
3	A/TAI/3/2012	TAI12-03	633	617	0	97.47	2.53	ASIA	Sea-97
4	A/TAI/4/2012	TAI12-04	633	617	0	97.47	2.53	ASIA	Sea-97
5	A/TAI/9/2012	TAI12-09	633	617	0	97.47	2.53	ASIA	Sea-97
6	A/TAI 3/12* (TRRL)	TAI12-AA	633	617	0	97.47	2.53	ASIA	Sea-97
7	A/TAI 4/12* (TRRL)	TAI12-AB	633	617	0	97.47	2.53	ASIA	Sea-97
8	A/MAY/20/2011	MAY11-20	633	614	0	97.00	3.00	ASIA	Sea-97
9	A/TAI/12/2012	TAI12-12	633	614	0	97.00	3.00	ASIA	Sea-97
10	A/TAI/5/2012	TAI12-05	633	614	0	97.00	3.00	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	592	0	93.52	6.48	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	572	0	90.36	9.64	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	551	0	87.05	12.95	ASIA	Thai-87
4	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	524	0	82.39	17.61	ASIA	A15
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	523	0	82.23	17.77	ASIA	A <sub>22</sub>
6	A/IRN/2/87 (EF208770)	IRN87-02	633	519	0	81.99	18.01	ASIA	Iran-87
7	A/TUR/33/2008 (FJ755155)	TUR08-33	636	520	0	81.76	18.24	ASIA	Iran-05 <sup>EZM-07</sup>
8	A/AFG/10/2010	AFG10-10	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>HER-10</sup>
9	A/IRN/1/2005 (EF208769)	IRN05-01	636	518	0	81.45	18.55	ASIA	Iran-05
10	A/IRN/15/2012	IRN12-15	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>SIS-12</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/14/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 39/13 R2B1	
Location: Chiang Mai Province, Thailand	Topotype: ASIA
Date collected: 16/10/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-14.SEQ
Date received for sequencing: 23/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 18/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 15 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/12/2013	TAI13-12	636	636	0	100.00	0.00	ASIA	Sea-97
2	A/TAI/15/2013	TAI13-15	636	636	0	100.00	0.00	ASIA	Sea-97
3	A/TAI/4/2014	TAI14-04	636	635	0	99.84	0.16	ASIA	Sea-97
4	A/TAI/16/2013	TAI13-16	636	633	0	99.53	0.47	ASIA	Sea-97
5	A/VIT/42/2013	VIT13-42	633	628	0	99.21	0.79	ASIA	Sea-97
6	A/VIT/35/2013	VIT13-35	633	626	0	98.89	1.11	ASIA	Sea-97
7	A/VIT/54/2013	VIT13-54	633	626	0	98.89	1.11	ASIA	Sea-97
8	A/VIT/56/2013	VIT13-56	633	626	0	98.89	1.11	ASIA	Sea-97
9	A/TAI/17/2013	TAI13-17	636	628	0	98.74	1.26	ASIA	Sea-97
10	A/TAI/20/2013	TAI13-20	636	628	0	98.74	1.26	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	590	0	93.21	6.79	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	575	0	90.84	9.16	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	559	0	88.31	11.69	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	523	0	82.62	17.38	ASIA	Iran-87
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	524	0	82.39	17.61	ASIA	A <sub>22</sub>
6	A/IRN/1/2011	IRN11-01	636	522	0	82.08	17.92	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/IRN/1/96 (EF208771)	IRN96-01	635	518	1	81.57	18.43	ASIA	Iran-96
8	A/GHA/16/73 (KF561698)	GHA73-16	633	516	0	81.52	18.48	AFRICA	G-VI
9	A/IRN/78/2009	IRN09-78	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>FAR-09</sup>
10	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	518	0	81.45	18.55	AFRICA	G-III

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A WRLFMD Ref No: TAI/15/2013 Batch No: WRLFMD/2014/00022 Sender Ref: 47-2/13 R1B2 Location: Lampang Province, Thailand Date collected: 21/10/2013 Date received by WRLFMD: 19/06/2014 Date received for sequencing: 01/08/2014 Species: Cattle Material used: BTy1 18/07/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 07/08/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska  Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: TAI13-15.SEQ Date sequence last updated: 05/08/2014 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1981 Min. no. of nt for comparison: 600 Total turn-around time: 49 days Sequencing time: 6 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/12/2013	TAI13-12	636	636	0	100.00	0.00	ASIA	Sea-97
2	A/TAI/14/2013	TAI13-14	636	636	0	100.00	0.00	ASIA	Sea-97
3	A/TAI/4/2014	TAI14-04	636	635	0	99.84	0.16	ASIA	Sea-97
4	A/TAI/16/2013	TAI13-16	636	633	0	99.53	0.47	ASIA	Sea-97
5	A/VIT/42/2013	VIT13-42	633	628	0	99.21	0.79	ASIA	Sea-97
6	A/VIT/35/2013	VIT13-35	633	626	0	98.89	1.11	ASIA	Sea-97
7	A/VIT/54/2013	VIT13-54	633	626	0	98.89	1.11	ASIA	Sea-97
8	A/VIT/56/2013	VIT13-56	633	626	0	98.89	1.11	ASIA	Sea-97
9	A/TAI/17/2013	TAI13-17	636	628	0	98.74	1.26	ASIA	Sea-97
10	A/TAI/20/2013	TAI13-20	636	628	0	98.74	1.26	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	590	0	93.21	6.79	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	575	0	90.84	9.16	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	559	0	88.31	11.69	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	523	0	82.62	17.38	ASIA	Iran-87
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	524	0	82.39	17.61	ASIA	A <sub>22</sub>
6	A/IRN/1/2011	IRN11-01	636	522	0	82.08	17.92	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/IRN/1/96 (EF208771)	IRN96-01	635	518	1	81.57	18.43	ASIA	Iran-96
8	A/GHA/16/73 (KF561698)	GHA73-16	633	516	0	81.52	18.48	AFRICA	G-VI
9	A/IRN/78/2009	IRN09-78	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>FAR-09</sup>
10	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	518	0	81.45	18.55	AFRICA	G-III

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/16/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 58/13 R3B1	
Location: Prachuap Khiri Khan Province, Thailand	Topotype: ASIA
Date collected: 31/10/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-16.SEQ
Date received for sequencing: 01/08/2014	Date sequence last updated: 05/08/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 18/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 6 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/4/2014	TAI14-04	636	634	0	99.69	0.31	ASIA	Sea-97
2	A/TAI/12/2013	TAI13-12	636	633	0	99.53	0.47	ASIA	Sea-97
3	A/TAI/14/2013	TAI13-14	636	633	0	99.53	0.47	ASIA	Sea-97
4	A/TAI/15/2013	TAI13-15	636	633	0	99.53	0.47	ASIA	Sea-97
5	A/VIT/42/2013	VIT13-42	633	627	0	99.05	0.95	ASIA	Sea-97
6	A/VIT/35/2013	VIT13-35	633	625	0	98.74	1.26	ASIA	Sea-97
7	A/VIT/54/2013	VIT13-54	633	625	0	98.74	1.26	ASIA	Sea-97
8	A/VIT/56/2013	VIT13-56	633	625	0	98.74	1.26	ASIA	Sea-97
9	A/TAI/17/2013	TAI13-17	636	627	0	98.58	1.42	ASIA	Sea-97
10	A/TAI/20/2013	TAI13-20	636	627	0	98.58	1.42	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	589	0	93.05	6.95	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	574	0	90.68	9.32	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	558	0	88.15	11.85	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	522	0	82.46	17.54	ASIA	Iran-87
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	524	0	82.39	17.61	ASIA	A <sub>22</sub>
6	A/IRN/1/2011	IRN11-01	636	520	0	81.76	18.24	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/IRN/1/96 (EF208771)	IRN96-01	635	518	1	81.57	18.43	ASIA	Iran-96
8	A/GHA/16/73 (KF561698)	GHA73-16	633	516	0	81.52	18.48	AFRICA	G-VI
9	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	518	0	81.45	18.55	AFRICA	G-III
10	A/BAR/6/2008 (FJ755010)	BAR08-06	636	516	0	81.13	18.87	ASIA	Iran-05 <sup>BAR-08</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A WRLFMD Ref No: TAI/17/2013 Batch No: WRLFMD/2014/00022 Sender Ref: 82/13 R1B2 Location: Nakhon Si Thammarat Province, Thailand Date collected: 12/11/2013 Date received by WRLFMD: 19/06/2014 Date received for sequencing: 01/08/2014 Species: Cattle Material used: BTy1 23/07/2014 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R	Report date: 07/08/2014 Reported by: N.J. Knowles Checked by: K. Bachanek-Bankowska Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: TAI13-17.SEQ Date sequence last updated: 05/08/2014 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1981 Min. no. of nt for comparison: 600 Total turn-around time: 49 days Sequencing time: 6 days
Comments:	

<b>Most Closely Related Viruses</b>									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/20/2013	TAI13-20	636	634	0	99.69	0.31	ASIA	Sea-97
2	A/LAO/1/2014	LAO14-01	636	632	0	99.37	0.63	ASIA	Sea-97
3	A/LAO/2/2014	LAO14-02	636	632	0	99.37	0.63	ASIA	Sea-97
4	A/LAO/3/2014	LAO14-03	636	632	0	99.37	0.63	ASIA	Sea-97
5	A/TAI/21/2013	TAI13-21	636	632	0	99.37	0.63	ASIA	Sea-97
6	A/TAI/3/2014	TAI14-03	636	631	0	99.21	0.79	ASIA	Sea-97
7	A/VIT/58/2013	VIT13-58	633	628	0	99.21	0.79	ASIA	Sea-97
8	A/VIT/42/2013	VIT13-42	633	627	0	99.05	0.95	ASIA	Sea-97
9	A/TAI/1/2014	TAI14-01	636	629	0	98.90	1.10	ASIA	Sea-97
10	A/TAI/2/2014	TAI14-02	636	629	0	98.90	1.10	ASIA	Sea-97
<b>Most Closely Related Reference Viruses</b>									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	587	0	92.73	7.27	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	571	0	90.21	9.79	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	557	0	87.99	12.01	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	522	0	82.08	17.92	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	519	0	81.99	18.01	ASIA	Iran-87
6	A/IRN/1/2011	IRN11-01	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/GHA/16/73 (KF561698)	GHA73-16	633	514	0	81.20	18.80	AFRICA	G-VI
8	A/IRN/1/96 (EF208771)	IRN96-01	635	515	1	81.10	18.90	ASIA	Iran-96
9	A/UGA/13/66 (KF561705)	UGA66-13	636	515	0	80.97	19.03	AFRICA	G-VII
10	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	515	0	80.97	19.03	AFRICA	G-III

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/18/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 79-1/13 R1B2	
Location: Phetchaburi Province, Thailand	Topotype: ASIA
Date collected: 12/10/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-18.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/19/2013	TAI13-19	636	636	0	100.00	0.00	ASIA	Sea-97
2	A/VIT/15/2012	VIT12-15	633	612	0	96.68	3.32	ASIA	Sea-97
3	A/VIT/16/2012	VIT12-16	633	612	0	96.68	3.32	ASIA	Sea-97
4	A/VIT/17/2012	VIT12-17	633	612	0	96.68	3.32	ASIA	Sea-97
5	A/VIT/18/2012	VIT12-18	633	612	0	96.68	3.32	ASIA	Sea-97
6	A/VIT/19/2012	VIT12-19	633	612	0	96.68	3.32	ASIA	Sea-97
7	A/VIT/20/2012	VIT12-20	633	612	0	96.68	3.32	ASIA	Sea-97
8	A/TAI/8/2010	TAI10-08	633	611	0	96.52	3.48	ASIA	Sea-97
9	A/THA 66-1/10* (TRRL)	TAI10-AA	633	611	0	96.52	3.48	ASIA	Sea-97
10	A/THA 69-6/10* (TRRL)	TAI10-AC	633	611	0	96.52	3.48	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	594	0	93.84	6.16	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	574	0	90.68	9.32	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	549	0	86.73	13.27	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	521	0	82.31	17.69	ASIA	Iran-87
5	A/IRN/78/2009	IRN09-78	636	521	0	81.92	18.08	ASIA	Iran-05 <sup>FAR-09</sup>
6	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	521	0	81.92	18.08	ASIA	A15
7	A22/IRQ/64 (AY593763)	IRQ64--A	636	521	0	81.92	18.08	ASIA	A <sub>22</sub>
8	A/IRN/125/2010	IRN10125	636	520	0	81.76	18.24	ASIA	Iran-05 <sup>SIS-10</sup>
9	A/IRN/1/2011	IRN11-01	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>FAR-11</sup>
10	A/TUR/3/2010	TUR10-03	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>KSS-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/19/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 80-3/13 R3B2	
Location: Phitsanulok Province, Thailand	Topotype: ASIA
Date collected: 12/10/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-19.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/18/2013	TAI13-18	636	636	0	100.00	0.00	ASIA	Sea-97
2	A/VIT/15/2012	VIT12-15	633	612	0	96.68	3.32	ASIA	Sea-97
3	A/VIT/16/2012	VIT12-16	633	612	0	96.68	3.32	ASIA	Sea-97
4	A/VIT/17/2012	VIT12-17	633	612	0	96.68	3.32	ASIA	Sea-97
5	A/VIT/18/2012	VIT12-18	633	612	0	96.68	3.32	ASIA	Sea-97
6	A/VIT/19/2012	VIT12-19	633	612	0	96.68	3.32	ASIA	Sea-97
7	A/VIT/20/2012	VIT12-20	633	612	0	96.68	3.32	ASIA	Sea-97
8	A/TAI/8/2010	TAI10-08	633	611	0	96.52	3.48	ASIA	Sea-97
9	A/THA 66-1/10* (TRRL)	TAI10-AA	633	611	0	96.52	3.48	ASIA	Sea-97
10	A/THA 69-6/10* (TRRL)	TAI10-AC	633	611	0	96.52	3.48	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	594	0	93.84	6.16	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	574	0	90.68	9.32	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	549	0	86.73	13.27	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	521	0	82.31	17.69	ASIA	Iran-87
5	A/IRN/78/2009	IRN09-78	636	521	0	81.92	18.08	ASIA	Iran-05 <sup>FAR-09</sup>
6	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	521	0	81.92	18.08	ASIA	A15
7	A22/IRQ/64 (AY593763)	IRQ64--A	636	521	0	81.92	18.08	ASIA	A <sub>22</sub>
8	A/IRN/125/2010	IRN10125	636	520	0	81.76	18.24	ASIA	Iran-05 <sup>SIS-10</sup>
9	A/IRN/1/2011	IRN11-01	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>FAR-11</sup>
10	A/TUR/3/2010	TUR10-03	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>KSS-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/20/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 62-3/13 R2B1	
Location: Chiang Rai Province, Thailand	Topotype: ASIA
Date collected: 14/11/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-20.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 05/08/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/17/2013	TAI13-17	636	634	0	99.69	0.31	ASIA	Sea-97
2	A/LAO/1/2014	LAO14-01	636	632	0	99.37	0.63	ASIA	Sea-97
3	A/LAO/2/2014	LAO14-02	636	632	0	99.37	0.63	ASIA	Sea-97
4	A/LAO/3/2014	LAO14-03	636	632	0	99.37	0.63	ASIA	Sea-97
5	A/TAI/21/2013	TAI13-21	636	632	0	99.37	0.63	ASIA	Sea-97
6	A/TAI/3/2014	TAI14-03	636	631	0	99.21	0.79	ASIA	Sea-97
7	A/VIT/58/2013	VIT13-58	633	628	0	99.21	0.79	ASIA	Sea-97
8	A/VIT/42/2013	VIT13-42	633	627	0	99.05	0.95	ASIA	Sea-97
9	A/TAI/1/2014	TAI14-01	636	629	0	98.90	1.10	ASIA	Sea-97
10	A/TAI/2/2014	TAI14-02	636	629	0	98.90	1.10	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	587	0	92.73	7.27	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	571	0	90.21	9.79	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	557	0	87.99	12.01	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	522	0	82.08	17.92	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	519	0	81.99	18.01	ASIA	Iran-87
6	A/IRN/1/2011	IRN11-01	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/GHA/16/73 (KF561698)	GHA73-16	633	514	0	81.20	18.80	AFRICA	G-VI
8	A/UGA/13/66 (KF561705)	UGA66-13	636	516	0	81.13	18.87	AFRICA	G-VII
9	A/IRN/1/96 (EF208771)	IRN96-01	635	515	1	81.10	18.90	ASIA	Iran-96
10	A/IRN/78/2009	IRN09-78	636	515	0	80.97	19.03	ASIA	Iran-05 <sup>FAR-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/21/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 85/13 R1B2	
Location: Roi Et Province, Thailand	Topotype: ASIA
Date collected: 21/11/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-21.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/LAO/1/2014	LAO14-01	636	632	0	99.37	0.63	ASIA	Sea-97
2	A/LAO/2/2014	LAO14-02	636	632	0	99.37	0.63	ASIA	Sea-97
3	A/LAO/3/2014	LAO14-03	636	632	0	99.37	0.63	ASIA	Sea-97
4	A/TAI/17/2013	TAI13-17	636	632	0	99.37	0.63	ASIA	Sea-97
5	A/TAI/20/2013	TAI13-20	636	632	0	99.37	0.63	ASIA	Sea-97
6	A/TAI/3/2014	TAI14-03	636	631	0	99.21	0.79	ASIA	Sea-97
7	A/VIT/58/2013	VIT13-58	633	628	0	99.21	0.79	ASIA	Sea-97
8	A/TAI/1/2014	TAI14-01	636	629	0	98.90	1.10	ASIA	Sea-97
9	A/TAI/2/2014	TAI14-02	636	629	0	98.90	1.10	ASIA	Sea-97
10	A/VIT/42/2013	VIT13-42	633	625	0	98.74	1.26	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	587	0	92.73	7.27	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	571	0	90.21	9.79	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	557	0	87.99	12.01	ASIA	Thai-87
4	A/IRN/2/87 (EF208770)	IRN87-02	633	521	0	82.31	17.69	ASIA	Iran-87
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	520	0	81.76	18.24	ASIA	A <sub>22</sub>
6	A/IRN/1/2011	IRN11-01	636	518	0	81.45	18.55	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/GHA/16/73 (KF561698)	GHA73-16	633	512	0	80.88	19.12	AFRICA	G-VI
8	A/IRN/1/96 (EF208771)	IRN96-01	635	513	1	80.79	19.21	ASIA	Iran-96
9	A/UGA/13/66 (KF561705)	UGA66-13	636	513	0	80.66	19.34	AFRICA	G-VII
10	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	513	0	80.66	19.34	AFRICA	G-III

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/22/2013	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 94/13 B3	
Location: Pattani Province, Thailand	Topotype: ASIA
Date collected: 29/11/2013	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI13-22.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/13/2013	TAI13-13	636	635	0	99.84	0.16	ASIA	Sea-97
2	A/MAY/5/2012	MAY12-05	636	619	0	97.33	2.67	ASIA	Sea-97
3	A/TAI/3/2012	TAI12-03	633	616	0	97.31	2.69	ASIA	Sea-97
4	A/TAI/4/2012	TAI12-04	633	616	0	97.31	2.69	ASIA	Sea-97
5	A/TAI/9/2012	TAI12-09	633	616	0	97.31	2.69	ASIA	Sea-97
6	A/TAI 3/12* (TRRL)	TAI12-AA	633	616	0	97.31	2.69	ASIA	Sea-97
7	A/TAI 4/12* (TRRL)	TAI12-AB	633	616	0	97.31	2.69	ASIA	Sea-97
8	A/MAY/20/2011	MAY11-20	633	613	0	96.84	3.16	ASIA	Sea-97
9	A/TAI/12/2012	TAI12-12	633	613	0	96.84	3.16	ASIA	Sea-97
10	A/TAI/5/2012	TAI12-05	633	613	0	96.84	3.16	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	593	0	93.68	6.32	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	573	0	90.52	9.48	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	552	0	87.20	12.80	ASIA	Thai-87
4	A15/Bangkok/TAI/60 (AY593755)	TAI60--D	636	525	0	82.55	17.45	ASIA	A15
5	A22/IRQ/64 (AY593763)	IRQ64--A	636	524	0	82.39	17.61	ASIA	A <sub>22</sub>
6	A/IRN/2/87 (EF208770)	IRN87-02	633	520	0	82.15	17.85	ASIA	Iran-87
7	A/TUR/33/2008 (FJ755155)	TUR08-33	636	521	0	81.92	18.08	ASIA	Iran-05 <sup>EZM-07</sup>
8	A/AFG/10/2010	AFG10-10	636	520	0	81.76	18.24	ASIA	Iran-05 <sup>HER-10</sup>
9	A/IRN/1/2005 (EF208769)	IRN05-01	636	519	0	81.60	18.40	ASIA	Iran-05
10	A/IRN/15/2012	IRN12-15	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>SIS-12</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/1/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 1-2/14 B3	
Location: Kanchanaburi Province, Thailand	Topotype: ASIA
Date collected: 02/01/2014	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI14-01.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 05/08/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/VIT/58/2013	VIT13-58	633	630	0	99.53	0.47	ASIA	Sea-97
2	A/TAI/2/2014	TAI14-02	636	630	0	99.06	0.94	ASIA	Sea-97
3	A/LAO/1/2014	LAO14-01	636	629	0	98.90	1.10	ASIA	Sea-97
4	A/LAO/2/2014	LAO14-02	636	629	0	98.90	1.10	ASIA	Sea-97
5	A/LAO/3/2014	LAO14-03	636	629	0	98.90	1.10	ASIA	Sea-97
6	A/TAI/17/2013	TAI13-17	636	629	0	98.90	1.10	ASIA	Sea-97
7	A/TAI/20/2013	TAI13-20	636	629	0	98.90	1.10	ASIA	Sea-97
8	A/TAI/21/2013	TAI13-21	636	629	0	98.90	1.10	ASIA	Sea-97
9	A/TAI/3/2014	TAI14-03	636	628	0	98.74	1.26	ASIA	Sea-97
10	A/VIT/42/2013	VIT13-42	633	623	0	98.42	1.58	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	586	0	92.58	7.42	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	572	0	90.36	9.64	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	556	0	87.84	12.16	ASIA	Thai-87
4	A/IRN/1/2011	IRN11-01	636	523	0	82.23	17.77	ASIA	Iran-05 <sup>FAR-11</sup>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	519	0	81.99	18.01	ASIA	Iran-87
6	A22/IRQ/64 (AY593763)	IRQ64--A	636	520	0	81.76	18.24	ASIA	A <sub>22</sub>
7	A/IRN/1/96 (EF208771)	IRN96-01	635	518	1	81.57	18.43	ASIA	Iran-96
8	A/GHA/16/73 (KF561698)	GHA73-16	633	516	0	81.52	18.48	AFRICA	G-VI
9	A/BAR/6/2008 (FJ755010)	BAR08-06	636	517	0	81.29	18.71	ASIA	Iran-05 <sup>BAR-08</sup>
10	A/IRN/15/2012	IRN12-15	636	517	0	81.29	18.71	ASIA	Iran-05 <sup>SIS-12</sup>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/2/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 2/14 B3	
Location: Chiang Mai Province, Thailand	Topotype: ASIA
Date collected: 02/01/2014	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI14-02.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/VIT/58/2013	VIT13-58	633	629	0	99.37	0.63	ASIA	Sea-97
2	A/TAI/1/2014	TAI14-01	636	630	0	99.06	0.94	ASIA	Sea-97
3	A/LAO/1/2014	LAO14-01	636	629	0	98.90	1.10	ASIA	Sea-97
4	A/LAO/2/2014	LAO14-02	636	629	0	98.90	1.10	ASIA	Sea-97
5	A/LAO/3/2014	LAO14-03	636	629	0	98.90	1.10	ASIA	Sea-97
6	A/TAI/17/2013	TAI13-17	636	629	0	98.90	1.10	ASIA	Sea-97
7	A/TAI/20/2013	TAI13-20	636	629	0	98.90	1.10	ASIA	Sea-97
8	A/TAI/21/2013	TAI13-21	636	629	0	98.90	1.10	ASIA	Sea-97
9	A/TAI/3/2014	TAI14-03	636	628	0	98.74	1.26	ASIA	Sea-97
10	A/VIT/42/2013	VIT13-42	633	622	0	98.26	1.74	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	588	0	92.89	7.11	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	572	0	90.36	9.64	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	560	0	88.47	11.53	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	523	0	82.23	17.77	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	518	0	81.83	18.17	ASIA	Iran-87
6	A/IRN/1/2011	IRN11-01	636	519	0	81.60	18.40	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/GHA/16/73 (KF561698)	GHA73-16	633	514	0	81.20	18.80	AFRICA	G-VI
8	A/IRN/1/96 (EF208771)	IRN96-01	635	515	1	81.10	18.90	ASIA	Iran-96
9	A/UGA/13/66 (KF561705)	UGA66-13	636	515	0	80.97	19.03	AFRICA	G-VII
10	A5/Allier/FRA/60 (AY593780)	FRA60--F	633	511	0	80.73	19.27	EURO-SA	A <sub>5</sub>

nt, nucleotides

\*, not a WRLFMD reference number

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/3/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 10/14 R2B3	
Location: Nakhon Phanom Province, Thailand	Topotype: ASIA
Date collected: 10/01/2014	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI14-03.SEQ
Date received for sequencing: 01/08/2014	Date sequence last updated: 05/08/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 6 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/LAO/1/2014	LAO14-01	636	631	0	99.21	0.79	ASIA	Sea-97
2	A/LAO/2/2014	LAO14-02	636	631	0	99.21	0.79	ASIA	Sea-97
3	A/LAO/3/2014	LAO14-03	636	631	0	99.21	0.79	ASIA	Sea-97
4	A/TAI/17/2013	TAI13-17	636	631	0	99.21	0.79	ASIA	Sea-97
5	A/TAI/20/2013	TAI13-20	636	631	0	99.21	0.79	ASIA	Sea-97
6	A/TAI/21/2013	TAI13-21	636	631	0	99.21	0.79	ASIA	Sea-97
7	A/VIT/58/2013	VIT13-58	633	627	0	99.05	0.95	ASIA	Sea-97
8	A/TAI/1/2014	TAI14-01	636	628	0	98.74	1.26	ASIA	Sea-97
9	A/TAI/2/2014	TAI14-02	636	628	0	98.74	1.26	ASIA	Sea-97
10	A/VIT/35/2013	VIT13-35	633	624	0	98.58	1.42	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	588	0	92.89	7.11	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	574	0	90.68	9.32	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	560	0	88.47	11.53	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	525	0	82.55	17.45	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	522	0	82.46	17.54	ASIA	Iran-87
6	A/IRN/1/2011	IRN11-01	636	523	0	82.23	17.77	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/GHA/16/73 (KF561698)	GHA73-16	633	515	0	81.36	18.64	AFRICA	G-VI
8	A/IRN/78/2009	IRN09-78	636	517	0	81.29	18.71	ASIA	Iran-05 <sup>FAR-09</sup>
9	A/UGA/13/66 (KF561705)	UGA66-13	636	517	0	81.29	18.71	AFRICA	G-VII
10	A12/UK/119/32 (M10975)	UKG32119	636	517	0	81.29	18.71	EURO-SA	A <sub>12</sub>

nt, nucleotides

\*, not a WRLFMD reference number

Assembled with Report Generator v4.3

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# FAO World Reference Laboratory for FMD Genotyping Report

IAH-P-EP-MEG-FOR-005-3

Page 1 of 1

Serotype: A	Report date: 07/08/2014
WRLFMD Ref No: TAI/4/2014	Reported by: N.J. Knowles
Batch No: WRLFMD/2014/00022	Checked by: K. Bachanek-Bankowska
Sender Ref: 13/2/14 B4	
Location: Ratchaburi Province, Thailand	Topotype: ASIA
Date collected: 16/01/2014	Genotype/strain: Sea-97
Date received by WRLFMD: 19/06/2014	Sequence filename: TAI14-04.SEQ
Date received for sequencing: 25/07/2014	Date sequence last updated: 30/07/2014
Species: Cattle	No. of Nt determined: 636
Material used: BTy1 23/07/2014	No. of ambiguities: 0
Region sequenced: VP1	Gene length: 636
RT-PCR primers: A-1C562F/EUR-2B52R	Total no. of comparisons: 1981
A-1C612F/EUR-2B52R	Min. no. of nt for comparison: 600
	Total turn-around time: 49 days
	Sequencing time: 13 days
Comments:	

Most Closely Related Viruses									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/12/2013	TAI13-12	636	635	0	99.84	0.16	ASIA	Sea-97
2	A/TAI/14/2013	TAI13-14	636	635	0	99.84	0.16	ASIA	Sea-97
3	A/TAI/15/2013	TAI13-15	636	635	0	99.84	0.16	ASIA	Sea-97
4	A/TAI/16/2013	TAI13-16	636	634	0	99.69	0.31	ASIA	Sea-97
5	A/VIT/42/2013	VIT13-42	633	629	0	99.37	0.63	ASIA	Sea-97
6	A/VIT/35/2013	VIT13-35	633	627	0	99.05	0.95	ASIA	Sea-97
7	A/VIT/54/2013	VIT13-54	633	627	0	99.05	0.95	ASIA	Sea-97
8	A/VIT/56/2013	VIT13-56	633	627	0	99.05	0.95	ASIA	Sea-97
9	A/TAI/17/2013	TAI13-17	636	629	0	98.90	1.10	ASIA	Sea-97
10	A/TAI/20/2013	TAI13-20	636	629	0	98.90	1.10	ASIA	Sea-97
Most Closely Related Reference Viruses									
(see <a href="http://www.wrlfmd.org/fmd_genotyping/prototypes.htm">http://www.wrlfmd.org/fmd_genotyping/prototypes.htm</a> )									
Pos.	Virus name	Filename	No. nt comp.	No. nt match.	No. of ambig.	% Id.	% Diff.	Topotype	Strain
1	A/TAI/7/2003 (HQ116312)	TAI03-07	633	591	0	93.36	6.64	ASIA	Sea-97
2	A/TAI/2/97 (EF208778)	TAI97-02	633	576	0	91.00	9.00	ASIA	Sea-97
3	A/TAI/118/87* (EF208777)	TAI87-AD	633	560	0	88.47	11.53	ASIA	Thai-87
4	A22/IRQ/64 (AY593763)	IRQ64--A	636	525	0	82.55	17.45	ASIA	A <sub>22</sub>
5	A/IRN/2/87 (EF208770)	IRN87-02	633	522	0	82.46	17.54	ASIA	Iran-87
6	A/IRN/1/2011	IRN11-01	636	522	0	82.08	17.92	ASIA	Iran-05 <sup>FAR-11</sup>
7	A/GHA/16/73 (KF561698)	GHA73-16	633	516	0	81.52	18.48	AFRICA	G-VI
8	A21/Lumbwa/KEN/64 (AY593761)	KEN64-AA	636	518	0	81.45	18.55	AFRICA	G-III
9	A/IRN/1/96 (EF208771)	IRN96-01	635	517	1	81.42	18.58	ASIA	Iran-96
10	A/IRN/78/2009	IRN09-78	636	517	0	81.29	18.71	ASIA	Iran-05 <sup>FAR-09</sup>

nt, nucleotides

\*, not a WRLFMD reference number

Assembled with Report Generator v4.3

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# Report on FMDV A in Thailand in 2013-2014

Batch: WRLFMD/2014/00022

◆ indicates viruses in this batch

Software: MEGA 6.06

Analysis

----- Phylogeny Reconstruction

Scope ----- All Selected Taxa

Statistical Method ----- Neighbor-joining

Phylogeny Test

----- Bootstrap method

No. of Bootstrap Replications ----- 1000

Substitution Model

----- Nucleotide

Model/Method ----- Kimura 2-parameter model

Substitutions to Include ----- d: Transitions + Transversions

Rates and Patterns

----- Uniform rates

Pattern among Lineages ----- Same (Homogeneous)

Data Subset to Use

----- Pairwise deletion

Codons Included ----- 1st+2nd+3rd+Non-Coding

No. of Sites : 639

No Of Bootstrap Reps = 1000

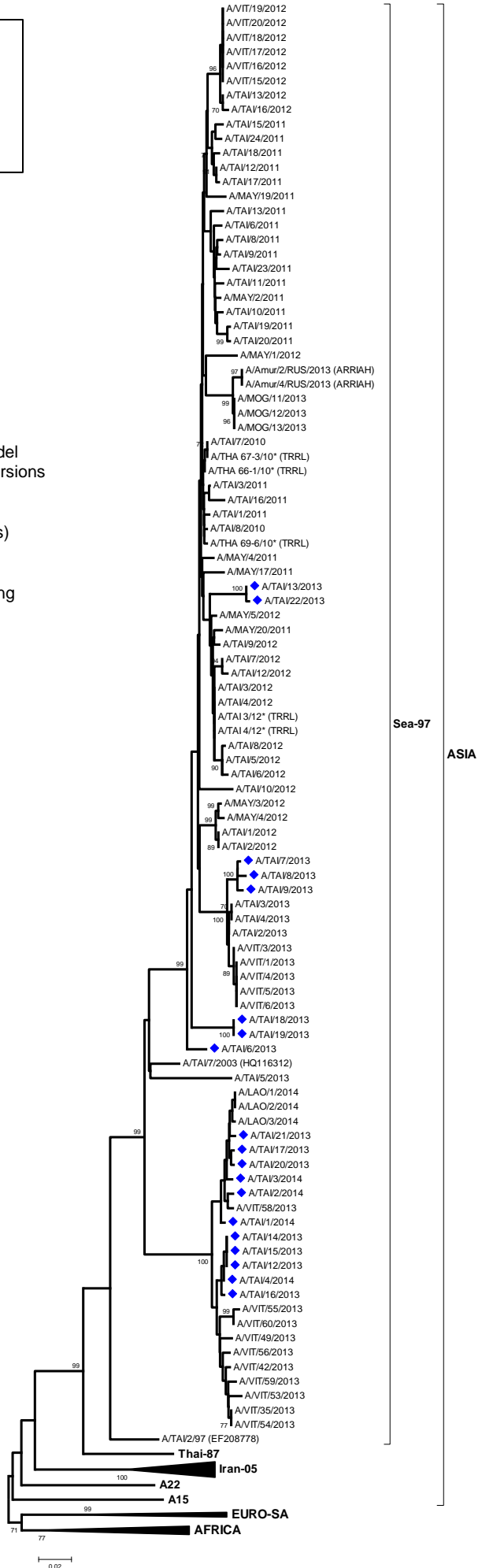
Only bootstrap values of 70% and above are shown

\*, not a WRLFMD Ref. No.

N.J. Knowles, J. Wadsworth & K. Bachanek-Bankowska,  
07 August 2014

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Sea-97

ASIA