

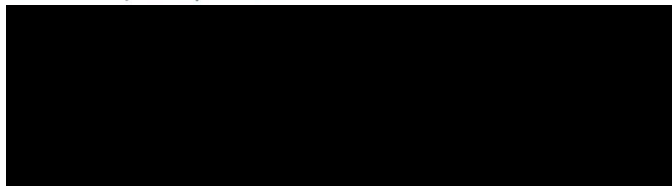


INSTITUTE FOR ANIMAL HEALTH
Director: Professor John Fazakerley BSc, MBA, PhD, FRCPath
PIRBRIGHT LABORATORY
Ash Road,
Pirbright,
Surrey,
GU24 0NF
Intn Tel: 00 44 1483 232441
Tel: 01483 232441, Fax: 01483 232621

FMD Genotyping Report

Lab Reference WRL Batch Number: WRLFMD/2012/00034

Sender Details:

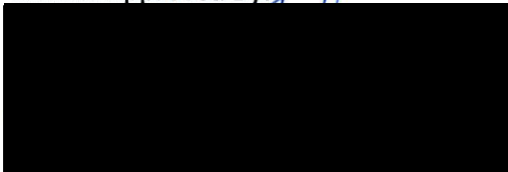


Date Received: 16th November 2012
Country of Origin: VIETNAM, SOCIALIST REPUBLIC OF
Date Reported: 18TH December 2012

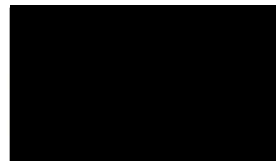
Dear Dr Nguyen Xuan Binh,

Sequencing work has now been completed in respect of the samples you submitted and the details are as attached. Please note that all of our phylogenetic trees can be accessed via the internet at: <http://www.wrlfmd.org/>

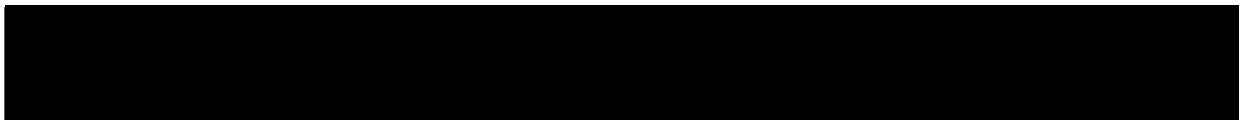
Results Approved By:



Official Stamp:



Date:



A UKAS accredited testing laboratory No. 4025.

To help us improve the quality of our service, please send any suggestions or requests to the Reference Laboratory by fax (+44 (0) 1483 232621 or email: trish.ryder@p.ac.uk. IAH actively seeks and appreciates feedback, if you would like to offer feedback please complete the WRLFMD survey here: <http://www.surveymonkey.com/s/WRLFMD>

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

Genotyping Report

Report Date for this Batch: 10 December 2012

FMDV type A

Country: Vietnam

Period: 2012

No. of samples: 6

BATCH: WRLFMD/2012/00034



The contents of this report are copyright and should not be reproduced without permission

© The Pirbright Institute

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

| | |
|--|---|
| Serotype: A WRLFMD Ref No: VIT/15/2012 Batch No: WRLFMD/2012/00034 Sender Ref: 4/12-10998/4882 Location: TP.HCM (Ho Chi Minh City), Vietnam Date collected: 16/10/2012 Date received by WRLFMD: 16/11/2012 Date received for sequencing: 03/12/2012 Species: Pig Material used: BHK2 BTy1 21/11/2012 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R | Report date: 07/12/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: VIT12-15.SEQ Date sequence last updated: 07/12/2012 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1507 Min. no. of nt for comparison: 600 Total turn-around time: 21 days Sequencing time: 4 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/16/2012 | VIT12-16 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 2 | A/VIT/17/2012 | VIT12-17 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 3 | A/VIT/18/2012 | VIT12-18 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 4 | A/VIT/19/2012 | VIT12-19 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 5 | A/VIT/20/2012 | VIT12-20 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 6 | A/THA 66-1/10* (TRRL) | TAI10-AA | 636 | 627 | 0 | 98.58 | 1.42 | ASIA | Sea-97 |
| 7 | A/TAI/12/2011 | TAI11-12 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 8 | A/TAI/24/2011 | TAI11-24 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 9 | A/TAI/7/2010 | TAI10-07 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 10 | A/THA 67-3/10* (TRRL) | TAI10-AB | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| Most Closely Related Reference Viruses | | | | | | | | | |
| (see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm) | | | | | | | | | |
| 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 | 636 | 600 | 0 | 94.34 | 5.66 | ASIA | Sea-97 |
| 2 | A/TAI/2/97 (EF208778) | TAI97-02 | 636 | 580 | 0 | 91.19 | 8.81 | ASIA | Sea-97 |
| 3 | A/TAI/118/87* (EF208777) | TAI87-AD | 636 | 556 | 0 | 87.42 | 12.58 | 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 | 523 | 0 | 82.23 | 17.77 | ASIA | A ₂₂ |
| 6 | A/IRN/78/2009 | IRN09-78 | 636 | 522 | 0 | 82.08 | 17.92 | ASIA | Iran-05 ^{FAR-09} |
| 7 | A/BAR/6/2008 | BAR08-06 | 636 | 520 | 0 | 81.76 | 18.24 | ASIA | Iran-05 ^{BAR-08} |
| 8 | A/AFG/10/2010 | AFG10-10 | 636 | 519 | 0 | 81.60 | 18.40 | ASIA | Iran-05 ^{HER-10} |
| 9 | A/AFG/6/2007 | AFG07-06 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{AFG-07} |
| 10 | A/IRN/125/2010 | IRN10125 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{SIS-10} |

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© The Pirbright Institute (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

| | |
|---|---|
| Serotype: A WRLFMD Ref No: VIT/16/2012 Batch No: WRLFMD/2012/00034 Sender Ref: 5/12-10998/4882 Location: TP.HCM (Ho Chi Minh City), Vietnam Date collected: 16/10/2012 Date received by WRLFMD: 16/11/2012 Date received for sequencing: 03/12/2012 Species: Pig Material used: BTy1 21/11/2012 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R | Report date: 07/12/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: VIT12-16.SEQ Date sequence last updated: 07/12/2012 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1507 Min. no. of nt for comparison: 600 Total turn-around time: 21 days Sequencing time: 4 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/15/2012 | VIT12-15 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 2 | A/VIT/17/2012 | VIT12-17 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 3 | A/VIT/18/2012 | VIT12-18 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 4 | A/VIT/19/2012 | VIT12-19 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 5 | A/VIT/20/2012 | VIT12-20 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 6 | A/THA 66-1/10* (TRRL) | TAI10-AA | 636 | 627 | 0 | 98.58 | 1.42 | ASIA | Sea-97 |
| 7 | A/TAI/12/2011 | TAI11-12 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 8 | A/TAI/24/2011 | TAI11-24 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 9 | A/TAI/7/2010 | TAI10-07 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 10 | A/THA 67-3/10* (TRRL) | TAI10-AB | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| Most Closely Related Reference Viruses | | | | | | | | | |
| (see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm) | | | | | | | | | |
| 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 | 636 | 600 | 0 | 94.34 | 5.66 | ASIA | Sea-97 |
| 2 | A/TAI/2/97 (EF208778) | TAI97-02 | 636 | 580 | 0 | 91.19 | 8.81 | ASIA | Sea-97 |
| 3 | A/TAI/118/87* (EF208777) | TAI87-AD | 636 | 556 | 0 | 87.42 | 12.58 | 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 | 523 | 0 | 82.23 | 17.77 | ASIA | A ₂₂ |
| 6 | A/IRN/78/2009 | IRN09-78 | 636 | 522 | 0 | 82.08 | 17.92 | ASIA | Iran-05 ^{FAR-09} |
| 7 | A/BAR/6/2008 | BAR08-06 | 636 | 520 | 0 | 81.76 | 18.24 | ASIA | Iran-05 ^{BAR-08} |
| 8 | A/AFG/10/2010 | AFG10-10 | 636 | 519 | 0 | 81.60 | 18.40 | ASIA | Iran-05 ^{HER-10} |
| 9 | A/AFG/6/2007 | AFG07-06 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{AFG-07} |
| 10 | A/IRN/125/2010 | IRN10125 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{SIS-10} |

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© *The Pirbright Institute* (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

| | |
|--|---|
| Serotype: A WRLFMD Ref No: VIT/17/2012 Batch No: WRLFMD/2012/00034 Sender Ref: 6/12-10998/4883 Location: TP.HCM (Ho Chi Minh City), Vietnam Date collected: 16/10/2012 Date received by WRLFMD: 16/11/2012 Date received for sequencing: 03/12/2012 Species: Pig Material used: BHK2 BTy1 21/11/2012 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R | Report date: 07/12/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: VIT12-17.SEQ Date sequence last updated: 07/12/2012 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1507 Min. no. of nt for comparison: 600 Total turn-around time: 21 days Sequencing time: 4 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/15/2012 | VIT12-15 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 2 | A/VIT/16/2012 | VIT12-16 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 3 | A/VIT/18/2012 | VIT12-18 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 4 | A/VIT/19/2012 | VIT12-19 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 5 | A/VIT/20/2012 | VIT12-20 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 6 | A/THA 66-1/10* (TRRL) | TAI10-AA | 636 | 627 | 0 | 98.58 | 1.42 | ASIA | Sea-97 |
| 7 | A/TAI/12/2011 | TAI11-12 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 8 | A/TAI/24/2011 | TAI11-24 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 9 | A/TAI/7/2010 | TAI10-07 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 10 | A/THA 67-3/10* (TRRL) | TAI10-AB | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| Most Closely Related Reference Viruses | | | | | | | | | |
| (see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm) | | | | | | | | | |
| 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 | 636 | 600 | 0 | 94.34 | 5.66 | ASIA | Sea-97 |
| 2 | A/TAI/2/97 (EF208778) | TAI97-02 | 636 | 580 | 0 | 91.19 | 8.81 | ASIA | Sea-97 |
| 3 | A/TAI/118/87* (EF208777) | TAI87-AD | 636 | 556 | 0 | 87.42 | 12.58 | 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 | 523 | 0 | 82.23 | 17.77 | ASIA | A ₂₂ |
| 6 | A/IRN/78/2009 | IRN09-78 | 636 | 522 | 0 | 82.08 | 17.92 | ASIA | Iran-05 ^{FAR-09} |
| 7 | A/BAR/6/2008 | BAR08-06 | 636 | 520 | 0 | 81.76 | 18.24 | ASIA | Iran-05 ^{BAR-08} |
| 8 | A/AFG/10/2010 | AFG10-10 | 636 | 519 | 0 | 81.60 | 18.40 | ASIA | Iran-05 ^{HER-10} |
| 9 | A/AFG/6/2007 | AFG07-06 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{AFG-07} |
| 10 | A/IRN/125/2010 | IRN10125 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{SIS-10} |

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© *The Pirbright Institute* (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

| | |
|---|---|
| Serotype: A WRLFMD Ref No: VIT/18/2012 Batch No: WRLFMD/2012/00034 Sender Ref: 7/12-10998/4883 Location: TP.HCM (Ho Chi Minh City), Vietnam Date collected: 16/10/2012 Date received by WRLFMD: 16/11/2012 Date received for sequencing: 03/12/2012 Species: Pig Material used: BTy1 21/11/2012 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R | Report date: 07/12/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: VIT12-18.SEQ Date sequence last updated: 07/12/2012 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1507 Min. no. of nt for comparison: 600 Total turn-around time: 21 days Sequencing time: 4 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/15/2012 | VIT12-15 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 2 | A/VIT/16/2012 | VIT12-16 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 3 | A/VIT/17/2012 | VIT12-17 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 4 | A/VIT/19/2012 | VIT12-19 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 5 | A/VIT/20/2012 | VIT12-20 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 6 | A/THA 66-1/10* (TRRL) | TAI10-AA | 636 | 627 | 0 | 98.58 | 1.42 | ASIA | Sea-97 |
| 7 | A/TAI/12/2011 | TAI11-12 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 8 | A/TAI/24/2011 | TAI11-24 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 9 | A/TAI/7/2010 | TAI10-07 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 10 | A/THA 67-3/10* (TRRL) | TAI10-AB | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| Most Closely Related Reference Viruses | | | | | | | | | |
| (see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm) | | | | | | | | | |
| 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 | 636 | 600 | 0 | 94.34 | 5.66 | ASIA | Sea-97 |
| 2 | A/TAI/2/97 (EF208778) | TAI97-02 | 636 | 580 | 0 | 91.19 | 8.81 | ASIA | Sea-97 |
| 3 | A/TAI/118/87* (EF208777) | TAI87-AD | 636 | 556 | 0 | 87.42 | 12.58 | 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 | 523 | 0 | 82.23 | 17.77 | ASIA | A ₂₂ |
| 6 | A/IRN/78/2009 | IRN09-78 | 636 | 522 | 0 | 82.08 | 17.92 | ASIA | Iran-05 ^{FAR-09} |
| 7 | A/BAR/6/2008 | BAR08-06 | 636 | 520 | 0 | 81.76 | 18.24 | ASIA | Iran-05 ^{BAR-08} |
| 8 | A/AFG/10/2010 | AFG10-10 | 636 | 519 | 0 | 81.60 | 18.40 | ASIA | Iran-05 ^{HER-10} |
| 9 | A/AFG/6/2007 | AFG07-06 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{AFG-07} |
| 10 | A/IRN/125/2010 | IRN10125 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{SIS-10} |

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© The Pirbright Institute (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

| | |
|---|---|
| Serotype: A WRLFMD Ref No: VIT/19/2012 Batch No: WRLFMD/2012/00034 Sender Ref: 8/12-10998/4905 Location: TP.HCM (Ho Chi Minh City), Vietnam Date collected: 16/10/2012 Date received by WRLFMD: 16/11/2012 Date received for sequencing: 03/12/2012 Species: Pig Material used: BTy1 22/11/2012 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R | Report date: 07/12/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: VIT12-19.SEQ Date sequence last updated: 07/12/2012 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1507 Min. no. of nt for comparison: 600 Total turn-around time: 21 days Sequencing time: 4 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/15/2012 | VIT12-15 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 2 | A/VIT/16/2012 | VIT12-16 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 3 | A/VIT/17/2012 | VIT12-17 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 4 | A/VIT/18/2012 | VIT12-18 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 5 | A/VIT/20/2012 | VIT12-20 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 6 | A/THA 66-1/10* (TRRL) | TAI10-AA | 636 | 627 | 0 | 98.58 | 1.42 | ASIA | Sea-97 |
| 7 | A/TAI/12/2011 | TAI11-12 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 8 | A/TAI/24/2011 | TAI11-24 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 9 | A/TAI/7/2010 | TAI10-07 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 10 | A/THA 67-3/10* (TRRL) | TAI10-AB | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| Most Closely Related Reference Viruses | | | | | | | | | |
| (see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm) | | | | | | | | | |
| 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 | 636 | 600 | 0 | 94.34 | 5.66 | ASIA | Sea-97 |
| 2 | A/TAI/2/97 (EF208778) | TAI97-02 | 636 | 580 | 0 | 91.19 | 8.81 | ASIA | Sea-97 |
| 3 | A/TAI/118/87* (EF208777) | TAI87-AD | 636 | 556 | 0 | 87.42 | 12.58 | 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 | 523 | 0 | 82.23 | 17.77 | ASIA | A ₂₂ |
| 6 | A/IRN/78/2009 | IRN09-78 | 636 | 522 | 0 | 82.08 | 17.92 | ASIA | Iran-05 ^{FAR-09} |
| 7 | A/BAR/6/2008 | BAR08-06 | 636 | 520 | 0 | 81.76 | 18.24 | ASIA | Iran-05 ^{BAR-08} |
| 8 | A/AFG/10/2010 | AFG10-10 | 636 | 519 | 0 | 81.60 | 18.40 | ASIA | Iran-05 ^{HER-10} |
| 9 | A/AFG/6/2007 | AFG07-06 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{AFG-07} |
| 10 | A/IRN/125/2010 | IRN10125 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{SIS-10} |

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© *The Pirbright Institute* (not to be reproduced without permission)

FAO World Reference Laboratory for FMD Genotyping Report

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

Page 1 of 1

| | |
|---|---|
| Serotype: A WRLFMD Ref No: VIT/20/2012 Batch No: WRLFMD/2012/00034 Sender Ref: 9/12-10998/4905 Location: TP.HCM (Ho Chi Minh City), Vietnam Date collected: 16/10/2012 Date received by WRLFMD: 16/11/2012 Date received for sequencing: 03/12/2012 Species: Pig Material used: BTy1 22/11/2012 Region sequenced: VP1 RT-PCR primers: A-1C562F/EUR-2B52R A-1C612F/EUR-2B52R | Report date: 07/12/2012 Reported by: N.J. Knowles Checked by: D.P. King Topotype: ASIA Genotype/strain: Sea-97 Sequence filename: VIT12-20.SEQ Date sequence last updated: 07/12/2012 No. of Nt determined: 636 No. of ambiguities: 0 Gene length: 636 Total no. of comparisons: 1507 Min. no. of nt for comparison: 600 Total turn-around time: 21 days Sequencing time: 4 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/15/2012 | VIT12-15 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 2 | A/VIT/16/2012 | VIT12-16 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 3 | A/VIT/17/2012 | VIT12-17 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 4 | A/VIT/18/2012 | VIT12-18 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 5 | A/VIT/19/2012 | VIT12-19 | 636 | 636 | 0 | 100.00 | 0.00 | ASIA | Sea-97 |
| 6 | A/THA 66-1/10* (TRRL) | TAI10-AA | 636 | 627 | 0 | 98.58 | 1.42 | ASIA | Sea-97 |
| 7 | A/TAI/12/2011 | TAI11-12 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 8 | A/TAI/24/2011 | TAI11-24 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 9 | A/TAI/7/2010 | TAI10-07 | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| 10 | A/THA 67-3/10* (TRRL) | TAI10-AB | 636 | 626 | 0 | 98.43 | 1.57 | ASIA | Sea-97 |
| Most Closely Related Reference Viruses | | | | | | | | | |
| (see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm) | | | | | | | | | |
| 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 | 636 | 600 | 0 | 94.34 | 5.66 | ASIA | Sea-97 |
| 2 | A/TAI/2/97 (EF208778) | TAI97-02 | 636 | 580 | 0 | 91.19 | 8.81 | ASIA | Sea-97 |
| 3 | A/TAI/118/87* (EF208777) | TAI87-AD | 636 | 556 | 0 | 87.42 | 12.58 | 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 | 523 | 0 | 82.23 | 17.77 | ASIA | A ₂₂ |
| 6 | A/IRN/78/2009 | IRN09-78 | 636 | 522 | 0 | 82.08 | 17.92 | ASIA | Iran-05 ^{FAR-09} |
| 7 | A/BAR/6/2008 | BAR08-06 | 636 | 520 | 0 | 81.76 | 18.24 | ASIA | Iran-05 ^{BAR-08} |
| 8 | A/AFG/10/2010 | AFG10-10 | 636 | 519 | 0 | 81.60 | 18.40 | ASIA | Iran-05 ^{HER-10} |
| 9 | A/AFG/6/2007 | AFG07-06 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{AFG-07} |
| 10 | A/IRN/125/2010 | IRN10125 | 636 | 518 | 0 | 81.45 | 18.55 | ASIA | Iran-05 ^{SIS-10} |

nt, nucleotides

*, not a WRLFMD reference number

Assembled with Report Generator v4.1

© *The Pirbright Institute* (not to be reproduced without permission)

Report on FMDV A in Vietnam in 2012

Batch: WRLFMD/2012/00034

◆ indicates viruses in this batch

Software: MEGA 5.1

Analysis

----- Phylogeny Reconstruction

Scope ----- All Selected Taxa

Statistical Method ----- Neighbor-joining

Phylogeny Test

Test of Phylogeny ----- Bootstrap method

No. of Bootstrap Replications ----- 1000

Substitution Model

Substitutions Type ----- Nucleotide

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

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

Rates and Patterns

Rates among Sites ----- Uniform rates

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

Data Subset to Use

Gaps/Missing Data Treatment ----- Pairwise deletion

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

No. of Sites : 639

No Of Bootstrap Reps = 1000

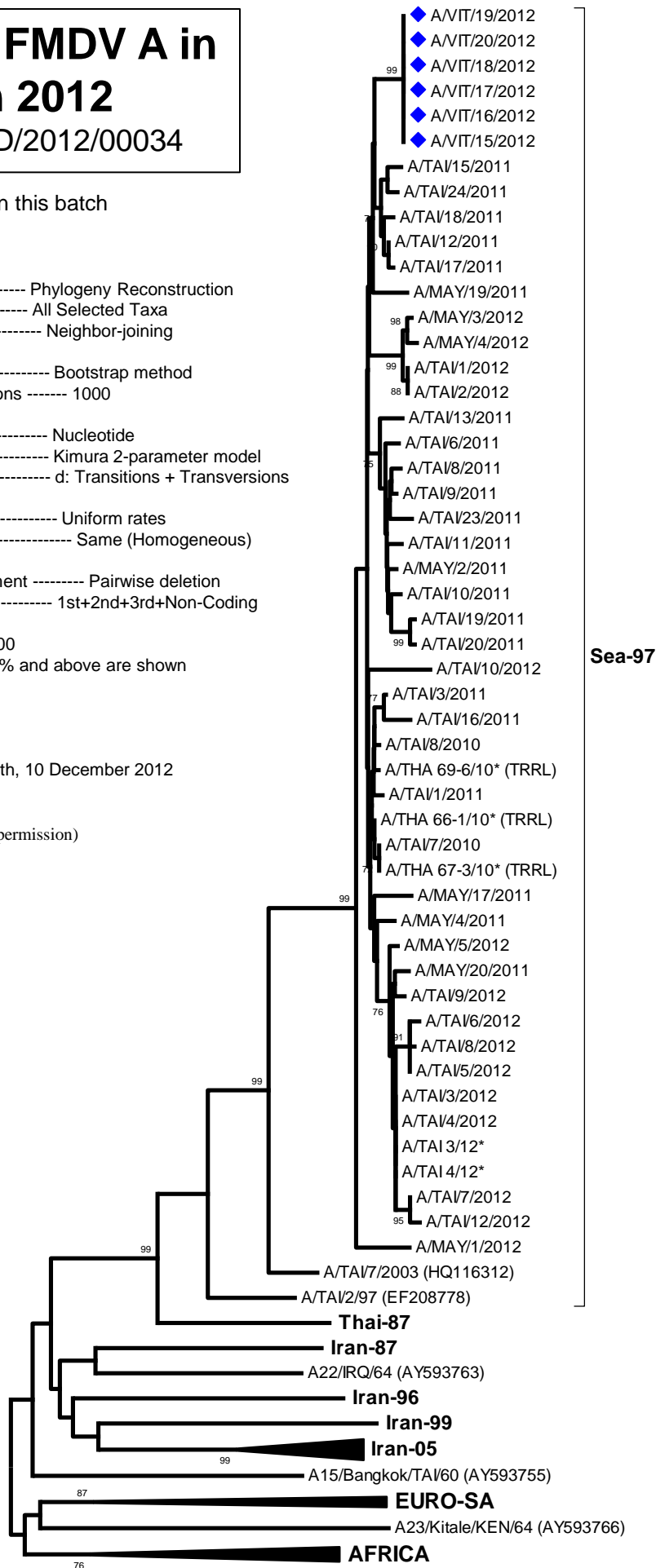
Only bootstrap values of 70% and above are shown

*, not a WRLFMD Ref. No.

N.J. Knowles & J. Wadsworth, 10 December 2012

© The Pirbright Institute

(not to be reproduced without permission)



0.02