

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

## Genotyping Report

FMDV serotype: O  
Country: Thailand  
Year: 2020  
Batch: WRLFMD/2020/00007  
No. of sequences: 12  
Report date: 8th February 2021  
Report generated by: Nick Knowles  
Report checked by: Jemma Wadsworth



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|                                    |   |
|------------------------------------|---|
| Virus sample name:                 | TAI/1/2020                              |
| Sender reference:                  | 13/20                                   |
| Location of origin:                | Lam Phaya Klang, Muak Lek, Saraburi     |
| Country of origin:                 | Thailand                                |
| Date of collection:                | 07/01/2020                              |
| Host species:                      | cattle                                  |
| Serotype:                          | O                                       |
| Topotype:                          | ME-SA                                   |
| Lineage:                           | Ind-2001                                |
| Sublineage:                        | e                                       |
| Sequence length:                   | 633                                     |
| Ambiguities:                       | 0                                       |
| Material submitted for sequencing: | BTy1                                    |
| Harvest date of material:          | 14/01/2021                              |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:           | 28/01/2021                              |
| Created:                           | 08/02/2021                              |
| Last updated:                      | 08/02/2021                              |

VIBASys IDs: sample 47302, genome 47303, sequence viba\_47304, sequencing info 47305

### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47283 | LAO/1/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47308 | TAI/2/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |

### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name  | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|-------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016 | cattle  | 95.6  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009  | cattle  | 93.5  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001  | bovine  | 91.0  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97    | bovine  | 90.7  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008  | gazelle | 89.7  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009 | cattle  | 88.3  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001 | porcine | 88.0  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_650   | IRN/8/2005  | ovine   | 87.9  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_719   | IRN/88/2009 |         | 87.8  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_666   | IRN/18/2010 | cattle  | 87.0  | 0        | O        | ME-SA    | PanAsia-2 | BAL-09     |

|                                    |   |
|------------------------------------|---|
| Virus sample name:                 | TAI/2/2020                              |
| Sender reference:                  | 42/20                                   |
| Location of origin:                | Lam Somphung, Muak Lek, Saraburi        |
| Country of origin:                 | Thailand                                |
| Date of collection:                | 23/01/2020                              |
| Host species:                      | cattle                                  |
| Serotype:                          | O                                       |
| Topotype:                          | ME-SA                                   |
| Lineage:                           | Ind-2001                                |
| Sublineage:                        | e                                       |
| Sequence length:                   | 633                                     |
| Ambiguities:                       | 0                                       |
| Material submitted for sequencing: | BTy1                                    |
| Harvest date of material:          | 14/01/2021                              |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:           | 28/01/2021                              |
| Created:                           | 08/02/2021                              |
| Last updated:                      | 08/02/2021                              |

VIBASys IDs: sample 47306, genome 47307, sequence viba\_47308, sequencing info 47309

### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47283 | LAO/1/2020  | cattle        | 99.8  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |

### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 95.7  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 93.7  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 90.9  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.5  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.6  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009   | cattle  | 88.2  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001   | porcine | 87.9  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009   | cattle  | 87.7  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005    | ovine   | 87.7  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_359   | Manisa/TUR/69 |         | 87.0  | 0        | O        | ME-SA    |           |            |

|                                    |   |
|------------------------------------|---|
| Virus sample name:                 | TAI/3/2020                              |
| Sender reference:                  | 57-1/20                                 |
| Location of origin:                | Lam Somphung, Muak Lek, Saraburi        |
| Country of origin:                 | Thailand                                |
| Date of collection:                | 31/01/2020                              |
| Host species:                      | cattle                                  |
| Serotype:                          | O                                       |
| Topotype:                          | ME-SA                                   |
| Lineage:                           | Ind-2001                                |
| Sublineage:                        | e                                       |
| Sequence length:                   | 633                                     |
| Ambiguities:                       | 0                                       |
| Material submitted for sequencing: | BTy1                                    |
| Harvest date of material:          | 14/01/2021                              |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:           | 28/01/2021                              |
| Created:                           | 08/02/2021                              |
| Last updated:                      | 08/02/2021                              |

VIBASys IDs: sample 47310, genome 47311, sequence viba\_47312, sequencing info 47313

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47283 | LAO/1/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47308 | TAI/2/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 95.9  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 93.5  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 91.0  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.7  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.7  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_285   | UKG/35/2001   | porcine | 88.0  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_766   | IRN/31/2009   | cattle  | 88.0  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_719   | IRN/88/2009   | cattle  | 87.5  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005    | ovine   | 87.5  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_359   | Manisa/TUR/69 | cattle  | 87.2  | 0        | O        | ME-SA    |           |            |

|                                    |  |
|------------------------------------|--|
| Virus sample name:                 | TAI/4/2020                                   |
| Sender reference:                  | 62-1/20                                      |
| Location of origin:                | Khanap Nak, Pak Phanang, Nakhon Si Thammarat |
| Country of origin:                 | Thailand                                     |
| Date of collection:                | 05/02/2020                                   |
| Host species:                      | cattle                                       |
| Serotype:                          | O  |
| Topotype:                          | ME-SA  |
| Lineage:                           | Ind-2001                                     |
| Sublineage:                        | e  |
| Sequence length:                   | 633  |
| Ambiguities:                       | 0  |
| Material submitted for sequencing: | BTy1   |
| Harvest date of material:          | 14/01/2021                                   |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R      |
| Received for sequencing:           | 28/01/2021                                   |
| Created:                           | 08/02/2021                                   |
| Last updated:                      | 08/02/2021                                   |

VIBASys IDs: sample 47314, genome 47315, sequence viba\_47316, sequencing info 47317

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_44967 | VIT/17/2019 | porcine       | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 100.0 | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45057 | VIT/22/2019 | cattle        | 99.8  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 96.1  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 94.0  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 91.2  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.9  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.9  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009   | cattle  | 88.5  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001   | porcine | 88.2  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009   | cattle  | 88.0  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005    | ovine   | 87.9  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_359   | Manisa/TUR/69 |         | 87.4  | 0        | O        | ME-SA    |           |            |

|   |   |
|---|---|
| Virus sample name:  | TAI/5/2020                              |
| Sender reference:   | 61/20                                   |
| Location of origin:   | Nongsaray, Pak Chong, Nakhon Ratchasima |
| Country of origin:  | Thailand                                |
| Date of collection:   | 07/02/2020                              |
| Host species:   | cattle                                  |
| Serotype:   | O                                       |
| Topotype:   | ME-SA                                   |
| Lineage:  | Ind-2001                                |
| Sublineage:   | e                                       |
| Sequence length:  | 633                                     |
| Ambiguities:  | 0                                       |
| Material submitted for sequencing:  | BTy1                                    |
| Harvest date of material:   | 14/01/2021                              |
| Primers:  | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:  | 28/01/2021                              |
| Created:  | 08/02/2021                              |
| Last updated:   | 08/02/2021                              |
| VIBASys IDs: sample 47318, genome 47319, sequence viba_47320, sequencing info 47321 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_44967 | VIT/17/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47316 | TAI/4/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 95.6  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 93.5  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 90.7  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.4  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.4  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009   | cattle  | 88.0  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001   | porcine | 87.7  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009   | cattle  | 87.5  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005    | ovine   | 87.4  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_359   | Manisa/TUR/69 | cattle  | 86.9  | 0        | O        | ME-SA    |           |            |

|   |   |
|---|---|
| Virus sample name:  | TAI/6/2020                              |
| Sender reference:   | 66-2/20                                 |
| Location of origin:   | Tha Pla Duk, Mae Tha, Lamphun           |
| Country of origin:  | Thailand                                |
| Date of collection:   | 18/02/2020                              |
| Host species:   | cattle                                  |
| Serotype:   | O                                       |
| Topotype:   | ME-SA                                   |
| Lineage:  | Ind-2001                                |
| Sublineage:   | e                                       |
| Sequence length:  | 633                                     |
| Ambiguities:  | 0                                       |
| Material submitted for sequencing:  | BTy1                                    |
| Harvest date of material:   | 14/01/2021                              |
| Primers:  | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:  | 28/01/2021                              |
| Created:  | 08/02/2021                              |
| Last updated:   | 08/02/2021                              |
| VIBASys IDs: sample 47322, genome 47323, sequence viba_47324, sequencing info 47325 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_44967 | VIT/17/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47316 | TAI/4/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 95.6  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 93.8  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 90.7  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.4  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.4  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009   | cattle  | 88.3  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_719   | IRN/88/2009   |         | 87.8  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_285   | UKG/35/2001   | porcine | 87.7  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_650   | IRN/8/2005    | ovine   | 87.7  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_359   | Manisa/TUR/69 |         | 87.2  | 0        | O        | ME-SA    |           |            |

|                                    |   |
|------------------------------------|---|
| Virus sample name:                 | TAI/7/2020                              |
| Sender reference:                  | 77/20                                   |
| Location of origin:                | Ranot, Ranot, Songkhla                  |
| Country of origin:                 | Thailand                                |
| Date of collection:                | 05/03/2020                              |
| Host species:                      | cattle                                  |
| Serotype:                          | O                                       |
| Topotype:                          | ME-SA                                   |
| Lineage:                           | Ind-2001                                |
| Sublineage:                        | e                                       |
| Sequence length:                   | 633                                     |
| Ambiguities:                       | 0                                       |
| Material submitted for sequencing: | BTy1                                    |
| Harvest date of material:          | 14/01/2021                              |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:           | 28/01/2021                              |
| Created:                           | 08/02/2021                              |
| Last updated:                      | 08/02/2021                              |

VIBASys IDs: sample 47326, genome 47327, sequence viba\_47328, sequencing info 47329

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47332 | TAI/8/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name  | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|-------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016 | cattle  | 95.4  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009  | cattle  | 93.7  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001  | bovine  | 90.5  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97    | bovine  | 90.2  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008  | gazelle | 89.3  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009 | cattle  | 88.3  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001 | porcine | 87.9  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009 | cattle  | 87.8  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005  | ovine   | 87.7  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_666   | IRN/18/2010 | cattle  | 87.0  | 0        | O        | ME-SA    | PanAsia-2 | BAL-09     |



|                                    |   |
|------------------------------------|---|
| Virus sample name:                 | TAI/8/2020                              |
| Sender reference:                  | 78/20                                   |
| Location of origin:                | Pa Tae, Ranot, Songkhla                 |
| Country of origin:                 | Thailand                                |
| Date of collection:                | 09/03/2020                              |
| Host species:                      | cattle                                  |
| Serotype:                          | O                                       |
| Topotype:                          | ME-SA                                   |
| Lineage:                           | Ind-2001                                |
| Sublineage:                        | e                                       |
| Sequence length:                   | 633                                     |
| Ambiguities:                       | 0                                       |
| Material submitted for sequencing: | BTy1                                    |
| Harvest date of material:          | 14/01/2021                              |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:           | 28/01/2021                              |
| Created:                           | 08/02/2021                              |
| Last updated:                      | 08/02/2021                              |

VIBASys IDs: sample 47330, genome 47331, sequence viba\_47332, sequencing info 47333

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47328 | TAI/7/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.2  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name  | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|-------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016 | cattle  | 95.3  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009  | cattle  | 93.2  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001  | bovine  | 90.4  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97    | bovine  | 90.1  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008  | gazelle | 89.3  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009 | cattle  | 88.2  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001 | porcine | 87.7  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009 | cattle  | 87.7  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005  | ovine   | 87.5  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_666   | IRN/18/2010 | cattle  | 86.9  | 0        | O        | ME-SA    | PanAsia-2 | BAL-09     |

|   |   |
|---|---|
| Virus sample name:  | TAI/9/2020                              |
| Sender reference:   | 89/20                                   |
| Location of origin:   | Phaya Yen, Pak Chong, Nakhon Ratchasima |
| Country of origin:  | Thailand                                |
| Date of collection:   | 07/04/2020                              |
| Host species:   | cattle                                  |
| Serotype:   | O                                       |
| Topotype:   | ME-SA                                   |
| Lineage:  | Ind-2001                                |
| Sublineage:   | e                                       |
| Sequence length:  | 633                                     |
| Ambiguities:  | 0                                       |
| Material submitted for sequencing:  | BTy1                                    |
| Harvest date of material:   | 14/01/2021                              |
| Primers:  | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:  | 28/01/2021                              |
| Created:  | 08/02/2021                              |
| Last updated:   | 08/02/2021                              |
| VIBASys IDs: sample 47334, genome 47335, sequence viba_47336, sequencing info 47337 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47304 | TAI/1/2020  | cattle        | 98.9  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47283 | LAO/1/2020  | cattle        | 98.9  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47308 | TAI/2/2020  | cattle        | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 98.7  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name  | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|-------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016 | cattle  | 95.1  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009  | cattle  | 93.4  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001  | bovine  | 90.5  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97    | bovine  | 90.2  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008  | gazelle | 89.3  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009 | cattle  | 87.5  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001 | porcine | 87.2  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009 |         | 87.2  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005  | ovine   | 87.1  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_666   | IRN/18/2010 | cattle  | 86.3  | 0        | O        | ME-SA    | PanAsia-2 | BAL-09     |

|                                    |   |
|------------------------------------|---|
| Virus sample name:                 | TAI/10/2020                             |
| Sender reference:                  | 96/20                                   |
| Location of origin:                | Ko Yai, Krasae Sin, Songkhla            |
| Country of origin:                 | Thailand                                |
| Date of collection:                | 15/04/2020                              |
| Host species:                      | cattle                                  |
| Serotype:                          | O                                       |
| Topotype:                          | ME-SA                                   |
| Lineage:                           | Ind-2001                                |
| Sublineage:                        | e                                       |
| Sequence length:                   | 633                                     |
| Ambiguities:                       | 0                                       |
| Material submitted for sequencing: | BTy1                                    |
| Harvest date of material:          | 14/01/2021                              |
| Primers:                           | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:           | 28/01/2021                              |
| Created:                           | 08/02/2021                              |
| Last updated:                      | 08/02/2021                              |

VIBASys IDs: sample 47338, genome 47339, sequence viba\_47340, sequencing info 47341

### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_44967 | VIT/17/2019 | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44975 | VIT/20/2019 | water buffalo | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44991 | VIT/29/2019 | water buffalo | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |

### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 95.7  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 93.7  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 90.9  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.5  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.6  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009   | cattle  | 88.2  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001   | porcine | 87.9  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009   | cattle  | 87.7  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_650   | IRN/8/2005    | ovine   | 87.5  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_359   | Manisa/TUR/69 |         | 87.4  | 0        | O        | ME-SA    |           |            |

|   |   |
|---|---|
| Virus sample name:  | TAI/11/2020                             |
| Sender reference:   | 91/20                                   |
| Location of origin:   | Ta, Khun Tan, Chiang Rai                |
| Country of origin:  | Thailand                                |
| Date of collection:   | 20/04/2020                              |
| Host species:   | cattle                                  |
| Serotype:   | O                                       |
| Topotype:   | ME-SA                                   |
| Lineage:  | Ind-2001                                |
| Sublineage:   | e                                       |
| Sequence length:  | 633                                     |
| Ambiguities:  | 0                                       |
| Material submitted for sequencing:  | BTy1                                    |
| Harvest date of material:   | 14/01/2021                              |
| Primers:  | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:  | 28/01/2021                              |
| Created:  | 08/02/2021                              |
| Last updated:   | 08/02/2021                              |
| VIBASys IDs: sample 47342, genome 47343, sequence viba_47344, sequencing info 47345 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_44967 | VIT/17/2019 | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47316 | TAI/4/2020  | cattle        | 99.7  | 0        | O        | ME-SA    | Ind-2001 | e          |

#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name  | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|-------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016 | cattle  | 95.7  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009  | cattle  | 93.7  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001  | bovine  | 90.9  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97    | bovine  | 90.5  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008  | gazelle | 89.6  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009 | cattle  | 88.2  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_719   | IRN/88/2009 |         | 88.0  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_285   | UKG/35/2001 | porcine | 87.9  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_650   | IRN/8/2005  | ovine   | 87.9  | 0        | O        | ME-SA    | PanAsia-2 |            |
| viba_666   | IRN/18/2010 | cattle  | 87.2  | 0        | O        | ME-SA    | PanAsia-2 | BAL-09     |

|   |   |
|---|---|
| Virus sample name:  | TAI/12/2020                             |
| Sender reference:   | 92/20                                   |
| Location of origin:   | Pa Phlu, Ban Hong, Lamphun              |
| Country of origin:  | Thailand                                |
| Date of collection:   | 20/04/2020                              |
| Host species:   | cattle                                  |
| Serotype:   | O                                       |
| Topotype:   | ME-SA                                   |
| Lineage:  | Ind-2001                                |
| Sublineage:   | e                                       |
| Sequence length:  | 633                                     |
| Ambiguities:  | 0                                       |
| Material submitted for sequencing:  | BTy1                                    |
| Harvest date of material:   | 14/01/2021                              |
| Primers:  | O-1C244F/EUR-2B52R, FMD-3161F/FMD-4303R |
| Received for sequencing:  | 28/01/2021                              |
| Created:  | 08/02/2021                              |
| Last updated:   | 08/02/2021                              |
| VIBASys IDs: sample 47346, genome 47347, sequence viba_47348, sequencing info 47349 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host          | % Id. | # Ambig. | serotype | topotype | lineage  | sublineage |
|------------|-------------|---------------|-------|----------|----------|----------|----------|------------|
| viba_47324 | TAI/6/2020  | cattle        | 99.5  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44967 | VIT/17/2019 | porcine       | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47295 | LAO/4/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44987 | VIT/28/2019 | water buffalo | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44979 | VIT/25/2019 | porcine       | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_45022 | VIT/7/2020  | porcine       | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47287 | LAO/2/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47291 | LAO/3/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_44983 | VIT/27/2019 | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |
| viba_47299 | LAO/5/2020  | cattle        | 99.4  | 0        | O        | ME-SA    | Ind-2001 | e          |

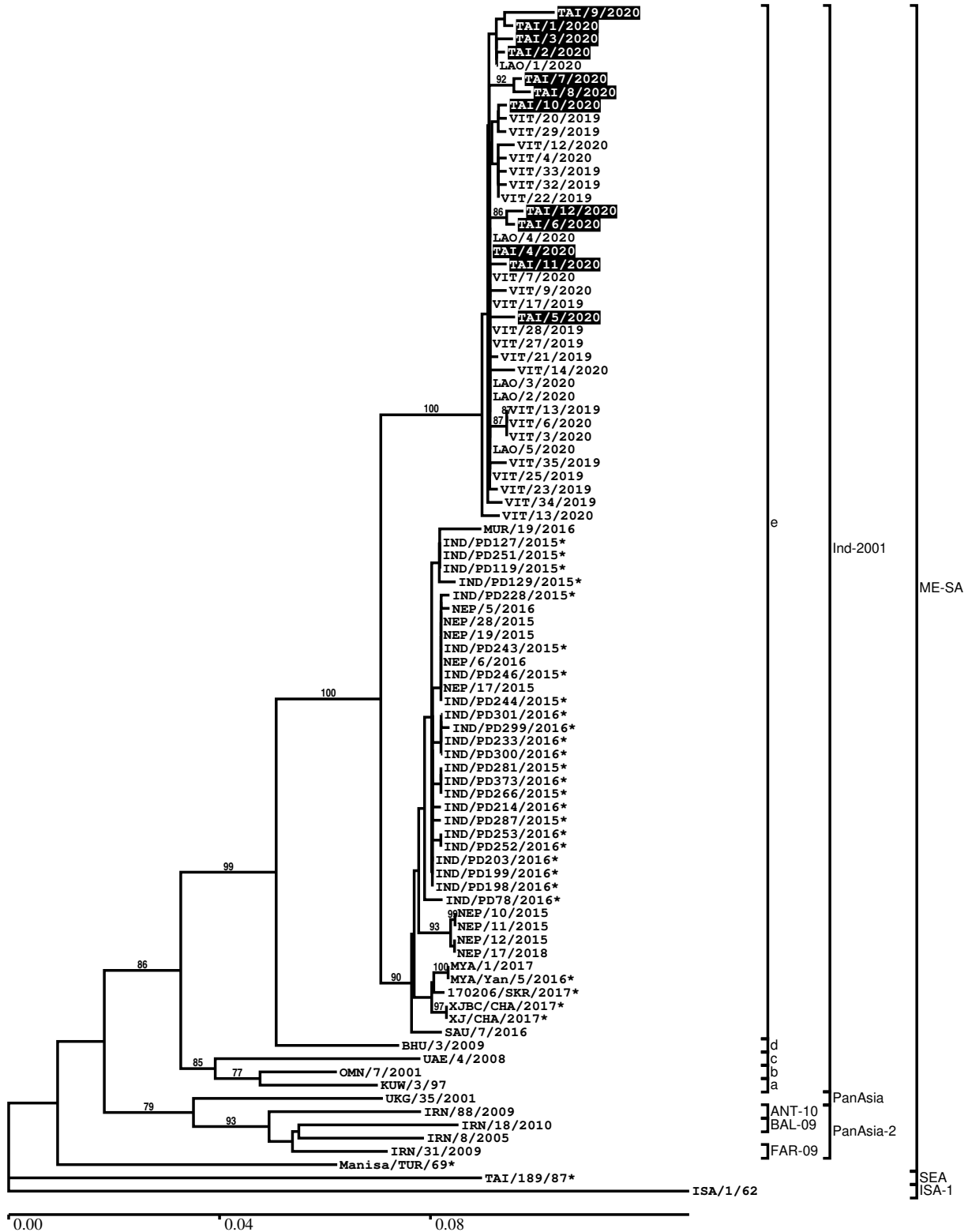
#### Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

| sequence   | virus name    | Host    | % Id. | # Ambig. | serotype | topotype | lineage   | sublineage |
|------------|---------------|---------|-------|----------|----------|----------|-----------|------------|
| viba_30238 | MUR/19/2016   | cattle  | 95.4  | 0        | O        | ME-SA    | Ind-2001  | e          |
| viba_293   | BHU/3/2009    | cattle  | 93.7  | 0        | O        | ME-SA    | Ind-2001  | d          |
| viba_541   | OMN/7/2001    | bovine  | 90.5  | 0        | O        | ME-SA    | Ind-2001  | b          |
| viba_705   | KUW/3/97      | bovine  | 90.2  | 0        | O        | ME-SA    | Ind-2001  | a          |
| viba_397   | UAE/4/2008    | gazelle | 89.6  | 0        | O        | ME-SA    | Ind-2001  | c          |
| viba_766   | IRN/31/2009   | cattle  | 87.8  | 0        | O        | ME-SA    | PanAsia-2 | FAR-09     |
| viba_285   | UKG/35/2001   | porcine | 87.6  | 0        | O        | ME-SA    | PanAsia   |            |
| viba_719   | IRN/88/2009   |         | 87.4  | 0        | O        | ME-SA    | PanAsia-2 | ANT-10     |
| viba_359   | Manisa/TUR/69 |         | 87.4  | 0        | O        | ME-SA    |           |            |
| viba_650   | IRN/8/2005    | ovine   | 87.2  | 0        | O        | ME-SA    | PanAsia-2 |            |

Report on FMDV O in Thailand in 2020

Batch: WRLFMD/2020/00007



\*, not a WRLFMD Reference Number

## Analysis Parameters

|  |   |
|--|---|
| VP1 subsequence extractor:             | vp1_O                                       |
| Query sequence set:                    | WRLFMD/2020/00007-Thailand-O (12 sequences) |
| Sequence database set:                 | allseqs_O (5144 sequences)                  |
| Prototype sequence set:                | !prototypes_O (49 sequences)                |
| Number of related sequences reported:  | 10  |
| Minimal VP1 subsequence match length   | 600   |
| Sequence alignment method:             | muscle (default parameters)                 |
| Sequence alignment length:             | 636   |
| Phylogeny reconstruction method:       | fdnadist, fneighbor                         |
| Number of bootstrap samples:           | 1000  |
| Random seed for bootstrapping:         | 1   |
| Displaying bootstrap values above:     | 70.0%                                       |
| Number of sequences in tree capped at: | 100   |
| Number of prototype sequences in tree: | 11  |
| VIBASys version:                       | reflabs-1.1.2                               |

## Sequences in the Phylogenetic Tree

All sequences in the tree are in taxonomic group FMDV/O

| label       | accession | host(s)       | lab    | country  | taxonomic information |
|-------------|-----------|---------------|--------|----------|-----------------------|
| TAI/9/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/1/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/3/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/2/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| LAO/1/2020  | n/a       | cattle        | WRLFMD | Laos     | ME-SA/Ind-2001/e      |
| TAI/7/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/8/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/10/2020 | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| VIT/20/2019 | n/a       | water buffalo | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/29/2019 | n/a       | water buffalo | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/12/2020 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/4/2020  | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/33/2019 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/32/2019 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/22/2019 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| TAI/12/2020 | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/6/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| LAO/4/2020  | n/a       | cattle        | WRLFMD | Laos     | ME-SA/Ind-2001/e      |
| TAI/4/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| TAI/11/2020 | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| VIT/7/2020  | n/a       | porcine       | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/9/2020  | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/17/2019 | n/a       | porcine       | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| TAI/5/2020  | n/a       | cattle        | WRLFMD | Thailand | ME-SA/Ind-2001/e      |
| VIT/28/2019 | n/a       | water buffalo | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/27/2019 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/21/2019 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/14/2020 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| LAO/3/2020  | n/a       | cattle        | WRLFMD | Laos     | ME-SA/Ind-2001/e      |
| LAO/2/2020  | n/a       | cattle        | WRLFMD | Laos     | ME-SA/Ind-2001/e      |
| VIT/13/2019 | n/a       | porcine       | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/6/2020  | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/3/2020  | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| LAO/5/2020  | n/a       | cattle        | WRLFMD | Laos     | ME-SA/Ind-2001/e      |
| VIT/35/2019 | n/a       | cattle        | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |
| VIT/25/2019 | n/a       | porcine       | WRLFMD | Vietnam  | ME-SA/Ind-2001/e      |

*continued on next page*

| label            | accession | host(s)       | lab        | country                         | taxonomic information  |
|------------------|-----------|---------------|------------|---------------------------------|------------------------|
| VIT/23/2019      | n/a       | water buffalo | WRLFMD     | Vietnam                         | ME-SA/Ind-2001/e       |
| VIT/34/2019      | n/a       | cattle        | WRLFMD     | Vietnam                         | ME-SA/Ind-2001/e       |
| VIT/13/2020      | n/a       | cattle        | WRLFMD     | Vietnam                         | ME-SA/Ind-2001/e       |
| MUR/19/2016      | MG972510  | cattle        | WRLFMD     | Mauritius                       | ME-SA/Ind-2001/e       |
| IND/PD127/2015*  | MT909627  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD251/2015*  | MT909652  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD119/2015*  | MT909624  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD129/2015*  | MT909628  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD228/2015*  | MT909646  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| NEP/5/2016       | KY449053  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| NEP/28/2015      | KY449052  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| NEP/19/2015      | KY449051  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| IND/PD243/2015*  | MT909648  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| NEP/6/2016       | KY449054  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| IND/PD246/2015*  | MT909650  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| NEP/17/2015      | KY449050  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| IND/PD244/2015*  | MT909649  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD301/2016*  | MT909688  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD299/2016*  | MT909686  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD233/2016*  | MT909676  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD300/2016*  | MT909687  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD281/2015*  | MT909658  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD373/2016*  | MT909702  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD266/2015*  | MT909655  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD214/2016*  | MT909675  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD287/2015*  | MT909659  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD253/2016*  | MT909681  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD252/2016*  | MT909680  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD203/2016*  | MT909674  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD199/2016*  | MT909673  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD198/2016*  | MT909672  | cattle        | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| IND/PD78/2016*   | MT909668  | water buffalo | PD-FMD     | India                           | ME-SA/Ind-2001/e       |
| NEP/10/2015      | MG972543  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| NEP/11/2015      | MG972544  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| NEP/12/2015      | MG972545  | cattle        | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| NEP/17/2018      | n/a       | goat          | WRLFMD     | Nepal                           | ME-SA/Ind-2001/e       |
| MYA/1/2017       | MG972517  | cattle        | WRLFMD     | Myanmar                         | ME-SA/Ind-2001/e       |
| MYA/Yan/5/2016*  | LC438823  | cattle        | NIAH-Japan | Myanmar                         | ME-SA/Ind-2001/e       |
| 170206/SKR/2017* | n/a       | cattle        | QIA        | Republic of Korea (South Korea) | ME-SA/Ind-2001/e       |
| XJBC/CHA/2017*   | KY696708  | n/a           | LVRI       | China                           | ME-SA/Ind-2001/e       |
| XJ/CHA/2017*     | MF461724  | cattle        | LVRI       | China                           | ME-SA/Ind-2001/e       |
| SAU/7/2016       | MG972596  | bovine        | WRLFMD     | Saudi Arabia                    | ME-SA/Ind-2001/e       |
| BHU/3/2009       | KM921814  | cattle        | WRLFMD     | Bhutan                          | ME-SA/Ind-2001/d       |
| UAE/4/2008       | KM921876  | gazelle       | WRLFMD     | United Arab Emirates            | ME-SA/Ind-2001/c       |
| OMN/7/2001       | DQ164941  | bovine        | WRLFMD     | Oman                            | ME-SA/Ind-2001/b       |
| KUW/3/97         | DQ164904  | bovine        | WRLFMD     | Kuwait                          | ME-SA/Ind-2001/a       |
| UKG/35/2001      | AJ539141  | porcine       | PIADC      | United Kingdom                  | ME-SA/PanAsia          |
| IRN/88/2009      | KY091282  | n/a           | WRLFMD     | Iran                            | ME-SA/PanAsia-2/ANT-10 |
| IRN/18/2010      | KY091283  | cattle        | WRLFMD     | Iran                            | ME-SA/PanAsia-2/BAL-09 |
| IRN/8/2005       | KY091281  | ovine         | WRLFMD     | Iran                            | ME-SA/PanAsia-2        |
| IRN/31/2009      | KY091284  | cattle        | WRLFMD     | Iran                            | ME-SA/PanAsia-2/FAR-09 |
| Manisa/TUR/69*   | AY593823  | n/a           | PIADC      | Turkey                          | ME-SA                  |
| TAI/189/87*      | KY091288  | bovine        | TRRL       | Thailand                        | SEA                    |
| ISA/1/62         | AJ303500  | n/a           | WRLFMD     | Indonesia                       | ISA-1                  |

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n/a, not available