# FMD Genotyping Reports

**Lab Reference WRL batch Number:** WRLMEG/2026/000021

**Sender Details:** [redacted]

**Country of Origin*:** Malaysia

Work has been completed in respect of the sequences recently submitted and the details are attached.

Please note that all our phylogenetic trees can be accessed via the internet at: http://www.wrlfmd.org/

**Results Approved By:** [redacted]

**Dat** [redacted] 2/9/2026

**Official Stamp:** [redacted]

[redacted]

To help us improve the quality of our service, please send any suggestions or requests to the Reference Laboratory by email (reflabsfeedback@pirbright.ac.uk).

* Data supplied by the customer

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

# FMDV Genotyping Report

**Generated from:** FMDtype | FMDV Genotyping Tool
**Downloaded on:** 27 August 2026
**Citation**: WRLFMD. 2026. FMDV Genotyping Report [WRLMEG/2026/000021]. (Accessed 27/08/26)

**FMDV serotype:** O
**Country:** Malaysia
**Year:** 2023-2025
**Batch:** WRLMEG/2026/000021
**No. of sequences:** 23
**Reported date:** 27 August 2026

**WRLFMD Website:** https://www.wrlfmd.org/
**Email:** reporting@pirbright.ac.uk

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FMDtype is supported through funding from

# Virus sample: MAY/005/2023

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 005/23 |
| **Location of origin:** | Pt 15983, Tanjung Tualang, Kinta, Perak |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2023-01-05 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678651 | MAY/006/2023 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1482459 | MYA/9/2022 | Cattle | 99.21 | 1 | O | ME-SA | Ind-2001 | e |
| 1482460 | MYA/10/2022 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1482461 | MYA/11/2022 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 95.58 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 91.80 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 91.78 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 91.17 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.73 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 89.42 | 0 | O | ME-SA | Ind-2001 | c |
| 12780 | PAK/58/2012 | Cattle | 88.77 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 17602 | UKG/35/2001 | | 88.64 | 0 | O | ME-SA | PanAsia | None |
| 12855 | PAK/7/2016 | Cattle | 88.45 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 212 | AFG/30/2010 | | 88.35 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/006/2023

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 006/23 |
| **Location of origin:** | Pt 15983, Tanjung Tualang, Kinta, Perak |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2023-01-05 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678650 | MAY/005/2023 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1482459 | MYA/9/2022 | Cattle | 99.05 | 1 | O | ME-SA | Ind-2001 | e |
| 1482460 | MYA/10/2022 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1482461 | MYA/11/2022 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 95.42 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 91.64 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 91.63 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 91.01 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.57 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 89.26 | 0 | O | ME-SA | Ind-2001 | c |
| 12780 | PAK/58/2012 | Cattle | 88.61 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 17602 | UKG/35/2001 | | 88.49 | 0 | O | ME-SA | PanAsia | None |
| 12855 | PAK/7/2016 | Cattle | 88.29 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 212 | AFG/30/2010 | | 88.19 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/0588/2023

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 0588/23 |
| **Location of origin:** | 186, Felda Palong 5, Jelai, Jempol, Negeri Sembilan |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2023-05-10 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 18234 | VIT/23/2019 | Water Buffalo | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 297339 | MAY/9/2020 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 297343 | MAY/127/2020 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 18111 | VIT/17/2019 | Pig | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 18195 | VIT/20/2019 | Water Buffalo | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 18250 | VIT/25/2019 | Pig | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 18268 | VIT/27/2019 | Cattle | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 18275 | VIT/28/2019 | Water Buffalo | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 18495 | VIT/7/2020 | Pig | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 297323 | LAO/2/2020 | Cattle | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.94 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 91.94 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.69 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.38 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 88.78 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 88.78 | 0 | O | ME-SA | Ind-2001 | c |
| 12855 | PAK/7/2016 | Cattle | 88.33 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 12780 | PAK/58/2012 | Cattle | 88.29 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 17602 | UKG/35/2001 | | 87.70 | 0 | O | ME-SA | PanAsia | None |
| 14465 | SRL/1/2019 | Cattle | 87.34 | 0 | O | ME-SA | SA-2018 | None |

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

# Virus sample: MAY/1468/2023

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 1468/23 |
| **Location of origin:** | Lot 1554, Lorong Aman, Kampung Setia Jaya, Batang Berjuntai, Kuala Selangor, Selangor |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2023-08-26 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 485481 | TAI/9/2022 | Cattle | 98.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485483 | TAI/11/2022 | Cattle | 98.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485484 | TAI/12/2022 | Cattle | 98.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485480 | TAI/8/2022 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 485477 | TAI/5/2022 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 485485 | TAI/13/2022 | Cattle | 98.58 | 1 | O | ME-SA | Ind-2001 | e |
| 485486 | TAI/15/2022 | Cattle | 98.58 | 1 | O | ME-SA | Ind-2001 | e |
| 1700578 | VIT/14/2024 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 485479 | TAI/7/2022 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 485482 | TAI/10/2022 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 95.10 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 92.73 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.85 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.90 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.42 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 89.10 | 0 | O | ME-SA | Ind-2001 | c |
| 12780 | PAK/58/2012 | Cattle | 88.92 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 12855 | PAK/7/2016 | Cattle | 88.64 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 8912 | IRN/88/2009 | | 88.34 | 0 | O | ME-SA | PanAsia-2 | ANT-10 |
| 212 | AFG/30/2010 | | 88.17 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/039/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 039/24 |
| **Location of origin:** | Batu 3, Jalan Kampung Poh, Bidor, Batang Padang, Perak |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-01-18 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678660 | MAY/2011/2024 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482460 | MYA/10/2022 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 1482461 | MYA/11/2022 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 1482464 | MYA/15/2022 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.63 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 91.15 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.85 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.54 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.42 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 89.10 | 0 | O | ME-SA | Ind-2001 | c |
| 12780 | PAK/58/2012 | Cattle | 88.29 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 12855 | PAK/7/2016 | Cattle | 88.29 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 14798 | SYR/18/62 | | 88.03 | 0 | O | WCSA-1 | Syr-62 | None |
| 17602 | UKG/35/2001 | | 88.01 | 0 | O | ME-SA | PanAsia | None |

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

# Virus sample: MAY/1084/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 1084/24 |
| **Location of origin:** | Jalan Bukit Tengah, Seberang Perai, Pulau Pinang |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-07-01 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678658 | MAY/1925/2024 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1678659 | MAY/2009/2024 | Pig | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1678656 | MAY/1864/2024 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 97.63 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 97.63 | 0 | O | ME-SA | Ind-2001 | e |
| 1482459 | MYA/9/2022 | Cattle | 97.63 | 1 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.79 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 91.31 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.69 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.38 | 0 | O | ME-SA | Ind-2001 | a |
| 17330 | UAE/4/2008 | Gazelle | 89.57 | 0 | O | ME-SA | Ind-2001 | c |
| 14504 | SRL/2/97 | Bovine | 89.26 | 0 | O | ME-SA | Srl-97 | None |
| 12855 | PAK/7/2016 | Cattle | 88.61 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 14798 | SYR/18/62 | | 88.03 | 0 | O | WCSA-1 | Syr-62 | None |
| 17602 | UKG/35/2001 | | 88.01 | 0 | O | ME-SA | PanAsia | None |
| 10481 | LAO/2/2006 | Cattle | 87.99 | 0 | O | ME-SA | PanAsia | None |

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

# Virus sample: MAY/1864/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 1864/24 |
| **Location of origin:** | Lot 2, Jalan Utas 15/7, Shah Alam, Petaling, Shah Alam, Selangor |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-09-11 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678659 | MAY/2009/2024 | Pig | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1678655 | MAY/1084/2024 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1678658 | MAY/1925/2024 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 96.52 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 96.52 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 96.52 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 96.52 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 96.37 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 96.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1482459 | MYA/9/2022 | Cattle | 96.37 | 1 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.52 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.20 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 89.43 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.12 | 0 | O | ME-SA | Ind-2001 | a |
| 17330 | UAE/4/2008 | Gazelle | 88.31 | 0 | O | ME-SA | Ind-2001 | c |
| 14504 | SRL/2/97 | Bovine | 87.99 | 0 | O | ME-SA | Srl-97 | None |
| 12855 | PAK/7/2016 | Cattle | 87.97 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 8590 | IRN/31/2009 | Cattle | 87.68 | 0 | O | ME-SA | PanAsia-2 | FAR-09 |
| 12780 | PAK/58/2012 | Cattle | 87.34 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 8875 | IRN/8/2005 | Sheep | 87.22 | 0 | O | ME-SA | PanAsia-2 | None |

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

# Virus sample: MAY/1922/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 1922/24 |
| **Location of origin:** | 2464, Kampung Tanjung Sabtu, Manir, Kuala Terengganu, Terengganu |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-09-26 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1200404 | TAI/10/2024 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1200399 | TAI/5/2024 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1200403 | TAI/9/2024 | Cattle | 98.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485481 | TAI/9/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 485483 | TAI/11/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 485484 | TAI/12/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1700578 | VIT/14/2024 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 485478 | TAI/6/2022 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 485480 | TAI/8/2022 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 485488 | TAI/17/2022 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.47 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 92.73 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.38 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.06 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.57 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 88.94 | 0 | O | ME-SA | Ind-2001 | c |
| 12780 | PAK/58/2012 | Cattle | 88.77 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 8912 | IRN/88/2009 | | 88.50 | 0 | O | ME-SA | PanAsia-2 | ANT-10 |
| 12855 | PAK/7/2016 | Cattle | 88.49 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 8590 | IRN/31/2009 | Cattle | 88.31 | 0 | O | ME-SA | PanAsia-2 | FAR-09 |

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

# Virus sample: MAY/1925/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 1925/24 |
| **Location of origin:** | Lot 72031, Jalan Bukit Kedah, Kampung Pong Manis, Tekai Kanan, Padang Terap, Kedah |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-09-26 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678655 | MAY/1084/2024 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1678659 | MAY/2009/2024 | Pig | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1678656 | MAY/1864/2024 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 1482459 | MYA/9/2022 | Cattle | 97.31 | 1 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.47 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 91.00 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.69 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.54 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 88.94 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 88.94 | 0 | O | ME-SA | Ind-2001 | c |
| 12855 | PAK/7/2016 | Cattle | 88.29 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 14798 | SYR/18/62 | | 87.72 | 0 | O | WCSA-1 | Syr-62 | None |
| 17602 | UKG/35/2001 | | 87.70 | 0 | O | ME-SA | PanAsia | None |
| 10481 | LAO/2/2006 | Cattle | 87.68 | 0 | O | ME-SA | PanAsia | None |

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

# Virus sample: MAY/2009/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2009/24 |
| **Location of origin:** | 1931 Jalan 6, Kampung Selamat, Seberang Perai Utara, Pulau Pinang |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-10-08 |
| **Host species:** | pig |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678655 | MAY/1084/2024 | Cattle | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1678656 | MAY/1864/2024 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1678658 | MAY/1925/2024 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 1482459 | MYA/9/2022 | Cattle | 97.31 | 1 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.47 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 91.00 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.38 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.06 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 88.94 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 88.94 | 0 | O | ME-SA | Ind-2001 | c |
| 12855 | PAK/7/2016 | Cattle | 88.61 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 12780 | PAK/58/2012 | Cattle | 87.97 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 14798 | SYR/18/62 | | 87.72 | 0 | O | WCSA-1 | Syr-62 | None |
| 8875 | IRN/8/2005 | Sheep | 87.70 | 0 | O | ME-SA | PanAsia-2 | None |

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

# Virus sample: MAY/2011/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2011/24 |
| **Location of origin:** | 139, Blok 2 Felda Palong 10, Gemas, Rompin, Jempol, Negeri Sembilan |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-10-13 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678654 | MAY/039/2024 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 98.26 | 0 | O | ME-SA | Ind-2001 | e |
| 1482460 | MYA/10/2022 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 1482461 | MYA/11/2022 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 1482464 | MYA/15/2022 | Cattle | 98.10 | 0 | O | ME-SA | Ind-2001 | e |
| 485489 | TAI/18/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 485492 | TAI/1/2023 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 94.63 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 91.47 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 91.17 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 90.54 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.42 | 0 | O | ME-SA | Srl-97 | None |
| 17330 | UAE/4/2008 | Gazelle | 89.10 | 0 | O | ME-SA | Ind-2001 | c |
| 14798 | SYR/18/62 | | 88.50 | 0 | O | WCSA-1 | Syr-62 | None |
| 12855 | PAK/7/2016 | Cattle | 88.17 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 10481 | LAO/2/2006 | Cattle | 88.15 | 0 | O | ME-SA | PanAsia | None |
| 12780 | PAK/58/2012 | Cattle | 88.13 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |

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

# Virus sample: MAY/2247/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2247/24 |
| **Location of origin:** | Kampung Lebak, Kuala Berang, Hulu Terengganu, Terengganu |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-11-20 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678663 | MAY/2290/2024 | Cattle | 97.95 | 0 | O | ME-SA | Ind-2001 | e |
| 1678665 | MAY/2383/2024 | Cattle | 97.95 | 0 | O | ME-SA | Ind-2001 | e |
| 1200398 | TAI/4/2024 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1200401 | TAI/7/2024 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1200407 | TAI/13/2024 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1200402 | TAI/8/2024 | Cattle | 97.63 | 0 | O | ME-SA | Ind-2001 | e |
| 1200408 | TAI/14/2024 | Cattle | 97.63 | 0 | O | ME-SA | Ind-2001 | e |
| 1678664 | MAY/2381/2024 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1200406 | TAI/12/2024 | Cattle | 97.16 | 0 | O | ME-SA | Ind-2001 | e |
| 1482442 | MYA-18/Mgy/2019 | Cattle | 93.68 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 91.15 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 88.94 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 88.47 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 87.99 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 86.89 | 0 | O | ME-SA | Srl-97 | None |
| 212 | AFG/30/2010 | | 86.61 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 12855 | PAK/7/2016 | Cattle | 86.48 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 8875 | IRN/8/2005 | Sheep | 86.41 | 0 | O | ME-SA | PanAsia-2 | None |
| 12780 | PAK/58/2012 | Cattle | 86.26 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 8355 | IRN/18/2010 | Cattle | 85.97 | 0 | O | ME-SA | PanAsia-2 | BAL-09 |

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

# Virus sample: MAY/2290/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2290/24 |
| **Location of origin:** | Kampung Guar Manong, Sayong, Kuala Kangsar, Perak |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-12-04 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678665 | MAY/2383/2024 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1200398 | TAI/4/2024 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1200401 | TAI/7/2024 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1200407 | TAI/13/2024 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1200402 | TAI/8/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1200408 | TAI/14/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1678664 | MAY/2381/2024 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1200406 | TAI/12/2024 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1678662 | MAY/2247/2024 | Cattle | 97.95 | 0 | O | ME-SA | Ind-2001 | e |
| 1482442 | MYA-18/Mgy/2019 | Cattle | 95.58 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.05 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.36 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 89.89 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.57 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 88.63 | 0 | O | ME-SA | Srl-97 | None |
| 212 | AFG/30/2010 | | 88.35 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 8875 | IRN/8/2005 | Sheep | 87.99 | 0 | O | ME-SA | PanAsia-2 | None |
| 12855 | PAK/7/2016 | Cattle | 87.89 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 12780 | PAK/58/2012 | Cattle | 87.82 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 8590 | IRN/31/2009 | Cattle | 87.52 | 0 | O | ME-SA | PanAsia-2 | FAR-09 |

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

# Virus sample: MAY/2381/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2381/24 |
| **Location of origin:** | Kampung Tangok, Repek Timor, Melawi, Bachok, Kelantan |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-12-22 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1200398 | TAI/4/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1200401 | TAI/7/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1200407 | TAI/13/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1200402 | TAI/8/2024 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1200408 | TAI/14/2024 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1678663 | MAY/2290/2024 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1678665 | MAY/2383/2024 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1200406 | TAI/12/2024 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1678662 | MAY/2247/2024 | Cattle | 97.47 | 0 | O | ME-SA | Ind-2001 | e |
| 1482442 | MYA-18/Mgy/2019 | Cattle | 95.42 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 92.89 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.20 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 89.73 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.42 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 88.47 | 0 | O | ME-SA | Srl-97 | None |
| 212 | AFG/30/2010 | | 87.87 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 12855 | PAK/7/2016 | Cattle | 87.86 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 12780 | PAK/58/2012 | Cattle | 87.66 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 8875 | IRN/8/2005 | Sheep | 87.52 | 0 | O | ME-SA | PanAsia-2 | None |
| 8590 | IRN/31/2009 | Cattle | 87.36 | 0 | O | ME-SA | PanAsia-2 | FAR-09 |

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

# Virus sample: MAY/2383/2024

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2383/24 |
| **Location of origin:** | No. 5, Jalan Tlk Intan, Bidor, Batang Padang, Perak |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2024-12-24 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678663 | MAY/2290/2024 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1200398 | TAI/4/2024 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1200401 | TAI/7/2024 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1200407 | TAI/13/2024 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1200402 | TAI/8/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1200408 | TAI/14/2024 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1678664 | MAY/2381/2024 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1200406 | TAI/12/2024 | Cattle | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1678662 | MAY/2247/2024 | Cattle | 97.95 | 0 | O | ME-SA | Ind-2001 | e |
| 1482442 | MYA-18/Mgy/2019 | Cattle | 95.58 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.05 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.36 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 89.89 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.57 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 88.63 | 0 | O | ME-SA | Srl-97 | None |
| 212 | AFG/30/2010 | | 88.35 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 8875 | IRN/8/2005 | Sheep | 87.99 | 0 | O | ME-SA | PanAsia-2 | None |
| 12855 | PAK/7/2016 | Cattle | 87.89 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 12780 | PAK/58/2012 | Cattle | 87.82 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 8590 | IRN/31/2009 | Cattle | 87.52 | 0 | O | ME-SA | PanAsia-2 | FAR-09 |

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

# Virus sample: MAY/616/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 616/25 |
| **Location of origin:** | Kg Atas Tol, Kuala Terengganu, Terengganu |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-04-10 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 485481 | TAI/9/2022 | Cattle | 95.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485483 | TAI/11/2022 | Cattle | 95.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485484 | TAI/12/2022 | Cattle | 95.89 | 0 | O | ME-SA | Ind-2001 | e |
| 485479 | TAI/7/2022 | Cattle | 95.74 | 0 | O | ME-SA | Ind-2001 | e |
| 485480 | TAI/8/2022 | Cattle | 95.74 | 0 | O | ME-SA | Ind-2001 | e |
| 485486 | TAI/15/2022 | Cattle | 95.74 | 1 | O | ME-SA | Ind-2001 | e |
| 485477 | TAI/5/2022 | Cattle | 95.58 | 0 | O | ME-SA | Ind-2001 | e |
| 485478 | TAI/6/2022 | Cattle | 95.58 | 0 | O | ME-SA | Ind-2001 | e |
| 485485 | TAI/13/2022 | Cattle | 95.58 | 1 | O | ME-SA | Ind-2001 | e |
| 485490 | TAI/19/2022 | Cattle | 95.58 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 92.42 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.84 | 0 | O | ME-SA | Ind-2001 | d |
| 14504 | SRL/2/97 | Bovine | 88.63 | 0 | O | ME-SA | Srl-97 | None |
| 11999 | OMN/7/2001 | | 88.31 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 87.86 | 0 | O | ME-SA | Ind-2001 | a |
| 12780 | PAK/58/2012 | Cattle | 87.38 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 12855 | PAK/7/2016 | Cattle | 87.38 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 17330 | UAE/4/2008 | Gazelle | 87.36 | 0 | O | ME-SA | Ind-2001 | c |
| 8912 | IRN/88/2009 | | 87.06 | 0 | O | ME-SA | PanAsia-2 | ANT-10 |
| 212 | AFG/30/2010 | | 86.66 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/762/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 762/25 |
| **Location of origin:** | 45B, Kg Kubang Buyung, Chabang Tiga, Kuala Terengganu, Terengganu |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-05-01 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678670 | MAY/2430/2025 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1678669 | MAY/944/2025 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1678668 | MAY/769/2025 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1700588 | VIT/9/2025 | Water Buffalo | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1656831 | MOG/3/2026 | Sheep | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1656832 | MOG/4/2026 | Sheep | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1656829 | MOG/1/2026 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 1656830 | MOG/2/2026 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.00 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.84 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 90.22 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 90.20 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 89.90 | 0 | O | ME-SA | Ind-2001 | a |
| 17330 | UAE/4/2008 | Gazelle | 88.47 | 0 | O | ME-SA | Ind-2001 | c |
| 14504 | SRL/2/97 | Bovine | 88.15 | 0 | O | ME-SA | Srl-97 | None |
| 10481 | LAO/2/2006 | Cattle | 87.52 | 0 | O | ME-SA | PanAsia | None |
| 12855 | PAK/7/2016 | Cattle | 87.50 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 17602 | UKG/35/2001 | | 87.38 | 0 | O | ME-SA | PanAsia | None |
| 212 | AFG/30/2010 | | 87.24 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/769/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 769/25 |
| **Location of origin:** | 1418E, Lorong Penaga, Pasir Panjang, Kuala Terengganu, Terengganu |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-05-05 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678667 | MAY/762/2025 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1678670 | MAY/2430/2025 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1678669 | MAY/944/2025 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1700588 | VIT/9/2025 | Water Buffalo | 99.21 | 0 | O | ME-SA | Ind-2001 | e |
| 1656831 | MOG/3/2026 | Sheep | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1656832 | MOG/4/2026 | Sheep | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1656829 | MOG/1/2026 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 1656830 | MOG/2/2026 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.31 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.84 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.52 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.22 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.90 | 0 | O | ME-SA | Ind-2001 | a |
| 17330 | UAE/4/2008 | Gazelle | 88.47 | 0 | O | ME-SA | Ind-2001 | c |
| 14504 | SRL/2/97 | Bovine | 88.15 | 0 | O | ME-SA | Srl-97 | None |
| 12855 | PAK/7/2016 | Cattle | 87.82 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 212 | AFG/30/2010 | | 87.56 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 12780 | PAK/58/2012 | Cattle | 87.50 | 0 | O | ME-SA | PanAsia-2 | ICT-12 |
| 17602 | UKG/35/2001 | | 87.38 | 0 | O | ME-SA | PanAsia | None |

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

# Virus sample: MAY/944/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 944/25 |
| **Location of origin:** | Kg Baru, Ulu Melaka, Langkawi, Kedah |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-05-15 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678667 | MAY/762/2025 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1678670 | MAY/2430/2025 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1678668 | MAY/769/2025 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1700588 | VIT/9/2025 | Water Buffalo | 99.37 | 0 | O | ME-SA | Ind-2001 | e |
| 1656831 | MOG/3/2026 | Sheep | 98.89 | 0 | O | ME-SA | Ind-2001 | e |
| 1656832 | MOG/4/2026 | Sheep | 98.89 | 0 | O | ME-SA | Ind-2001 | e |
| 1656829 | MOG/1/2026 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 1656830 | MOG/2/2026 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 96.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 96.84 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.68 | 0 | O | ME-SA | Ind-2001 | e |
| 3294 | BHU/3/2009 | Cattle | 90.36 | 0 | O | ME-SA | Ind-2001 | d |
| 11999 | OMN/7/2001 | | 90.06 | 0 | O | ME-SA | Ind-2001 | b |
| 10350 | KUW/3/97 | | 89.75 | 0 | O | ME-SA | Ind-2001 | a |
| 17330 | UAE/4/2008 | Gazelle | 88.47 | 0 | O | ME-SA | Ind-2001 | c |
| 14504 | SRL/2/97 | Bovine | 87.99 | 0 | O | ME-SA | Srl-97 | None |
| 10481 | LAO/2/2006 | Cattle | 87.36 | 0 | O | ME-SA | PanAsia | None |
| 12855 | PAK/7/2016 | Cattle | 87.34 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 17602 | UKG/35/2001 | | 87.22 | 0 | O | ME-SA | PanAsia | None |
| 212 | AFG/30/2010 | | 87.09 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/2430/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2430/25 |
| **Location of origin:** | D-46, Kampung Kuang Tengah, Chemor, Kinta, Perak |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-11-05 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678667 | MAY/762/2025 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1678669 | MAY/944/2025 | Cattle | 99.84 | 0 | O | ME-SA | Ind-2001 | e |
| 1678668 | MAY/769/2025 | Cattle | 99.68 | 0 | O | ME-SA | Ind-2001 | e |
| 1700588 | VIT/9/2025 | Water Buffalo | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1656831 | MOG/3/2026 | Sheep | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1656832 | MOG/4/2026 | Sheep | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1656829 | MOG/1/2026 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 1656830 | MOG/2/2026 | Cattle | 98.74 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.00 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 93.84 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 90.22 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 90.20 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 89.90 | 0 | O | ME-SA | Ind-2001 | a |
| 17330 | UAE/4/2008 | Gazelle | 88.47 | 0 | O | ME-SA | Ind-2001 | c |
| 14504 | SRL/2/97 | Bovine | 88.15 | 0 | O | ME-SA | Srl-97 | None |
| 10481 | LAO/2/2006 | Cattle | 87.52 | 0 | O | ME-SA | PanAsia | None |
| 12855 | PAK/7/2016 | Cattle | 87.50 | 0 | O | ME-SA | PanAsia-2 | PUN-16 |
| 17602 | UKG/35/2001 | | 87.38 | 0 | O | ME-SA | PanAsia | None |
| 212 | AFG/30/2010 | | 87.24 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |

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

# Virus sample: MAY/2532/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2532/25 |
| **Location of origin:** | Lebuh Ayer Keroh, Bukit Katil, Melaka Tengah, Melaka |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-11-25 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678672 | MAY/2538/2025 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1678673 | MAY/2555/2025 | Sheep | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1700590 | VIT/11/2025 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1700589 | VIT/10/2025 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1700591 | VIT/12/2025 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 1700592 | VIT/13/2025 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 95.26 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 91.64 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 91.31 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 90.69 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.42 | 0 | O | ME-SA | Srl-97 | None |
| 17602 | UKG/35/2001 | | 89.27 | 0 | O | ME-SA | PanAsia | None |
| 10481 | LAO/2/2006 | Cattle | 88.78 | 0 | O | ME-SA | PanAsia | None |
| 212 | AFG/30/2010 | | 88.66 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 8912 | IRN/88/2009 | | 88.52 | 0 | O | ME-SA | PanAsia-2 | ANT-10 |
| 8875 | IRN/8/2005 | Sheep | 88.49 | 0 | O | ME-SA | PanAsia-2 | None |

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

# Virus sample: MAY/2538/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2538/25 |
| **Location of origin:** | Lot 1415, Jalan Haji Noh, Batu 18, Kampung Sungai Tiram, Johor Bahru, Johor |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-11-28 |
| **Host species:** | cattle |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678671 | MAY/2532/2025 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1678673 | MAY/2555/2025 | Sheep | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1700590 | VIT/11/2025 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1700589 | VIT/10/2025 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1700591 | VIT/12/2025 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 1700592 | VIT/13/2025 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 95.26 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 91.64 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 91.31 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 90.69 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.42 | 0 | O | ME-SA | Srl-97 | None |
| 17602 | UKG/35/2001 | | 89.27 | 0 | O | ME-SA | PanAsia | None |
| 10481 | LAO/2/2006 | Cattle | 88.78 | 0 | O | ME-SA | PanAsia | None |
| 212 | AFG/30/2010 | | 88.66 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 8912 | IRN/88/2009 | | 88.52 | 0 | O | ME-SA | PanAsia-2 | ANT-10 |
| 8875 | IRN/8/2005 | Sheep | 88.49 | 0 | O | ME-SA | PanAsia-2 | None |

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

# Virus sample: MAY/2555/2025

## Sample details

| | |
|---|---|
| **Reception Date:** | 2026-04-24 |
| **Sender reference:** | 2555/25 |
| **Location of origin:** | No A37, Blok 4, Unit Tebu, Felda Chuping, Arau, Perlis |
| **Country of origin:** | Malaysia |
| **Date of collection:** | 2025-11-24 |
| **Host species:** | sheep |

## Genotyping details

| | |
|---|---|
| **Serotype:** | O |
| **Topotype:** | ME-SA |
| **Lineage:** | Ind-2001 |
| **Sublineage:** | e |

## Sequencing details

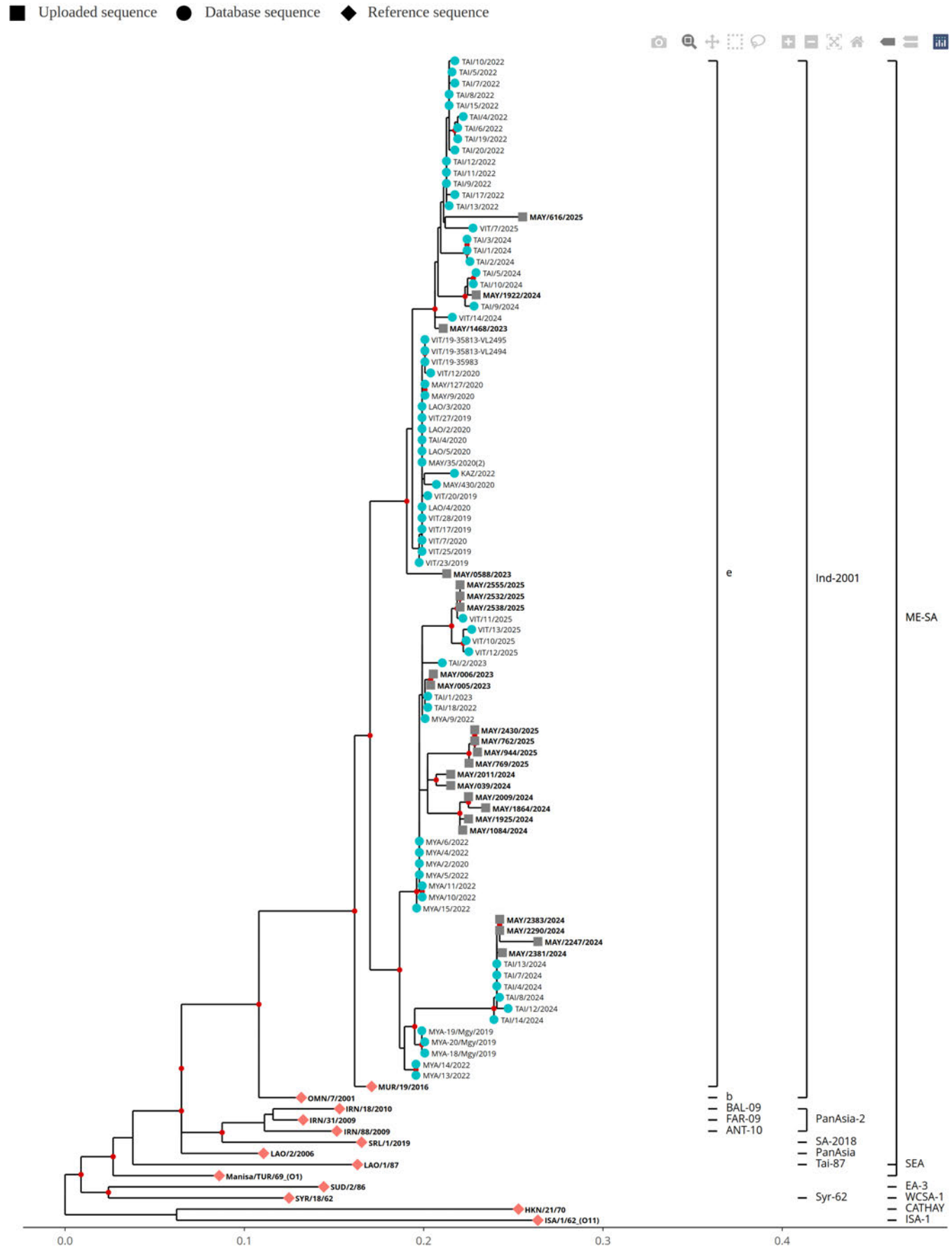
| | |
|---|---|
| **Material submitted for sequencing:** | NA |
| **Material Harvest Date:** | NA |
| **Sequence length:** | 636 |
| **Ambiguities:** | 0 |

## Most Closely Related FMDV Isolates

| Sequence ID | Virus Name | Host | % Id | #Ambig. | Serotype | Topotype | Lineage | Sublineage |
|---|---|---|---|---|---|---|---|---|
| **FMDV VP1 Sequences** | | | | | | | | |
| 1678671 | MAY/2532/2025 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1678672 | MAY/2538/2025 | Cattle | 100.00 | 0 | O | ME-SA | Ind-2001 | e |
| 1700590 | VIT/11/2025 | Cattle | 99.53 | 0 | O | ME-SA | Ind-2001 | e |
| 1700589 | VIT/10/2025 | Cattle | 99.05 | 0 | O | ME-SA | Ind-2001 | e |
| 1700591 | VIT/12/2025 | Cattle | 98.58 | 0 | O | ME-SA | Ind-2001 | e |
| 1700592 | VIT/13/2025 | Cattle | 98.42 | 0 | O | ME-SA | Ind-2001 | e |
| 1482454 | MYA/2/2020 | Pig | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482455 | MYA/4/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482456 | MYA/5/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| 1482457 | MYA/6/2022 | Cattle | 97.79 | 0 | O | ME-SA | Ind-2001 | e |
| **FMDV VP1 Prototype Sequences*** | | | | | | | | |
| 10989 | MUR/19/2016 | Cattle | 95.26 | 0 | O | ME-SA | Ind-2001 | e |
| 11999 | OMN/7/2001 | | 91.64 | 0 | O | ME-SA | Ind-2001 | b |
| 3294 | BHU/3/2009 | Cattle | 91.31 | 0 | O | ME-SA | Ind-2001 | d |
| 10350 | KUW/3/97 | | 90.69 | 0 | O | ME-SA | Ind-2001 | a |
| 14504 | SRL/2/97 | Bovine | 89.42 | 0 | O | ME-SA | Srl-97 | None |
| 17602 | UKG/35/2001 | | 89.27 | 0 | O | ME-SA | PanAsia | None |
| 10481 | LAO/2/2006 | Cattle | 88.78 | 0 | O | ME-SA | PanAsia | None |
| 212 | AFG/30/2010 | | 88.66 | 0 | O | ME-SA | PanAsia-2 | KHO-10 |
| 8912 | IRN/88/2009 | | 88.52 | 0 | O | ME-SA | PanAsia-2 | ANT-10 |
| 8875 | IRN/8/2005 | Sheep | 88.49 | 0 | O | ME-SA | PanAsia-2 | None |

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

# Tree


Uploaded sequence
Database sequence
Reference sequence
TAI/10/2022
TAI/5/2022
TAI/7/2022
TAI/8/2022
TAI/15/2022
TAI/4/2022
TAI/6/2022
TAI/19/2022
TAI/20/2022
TAI/12/2022
TAI/11/2022
TAI/9/2022
TAI/17/2022
TAI/13/2022
MAY/616/2025
VIT/7/2025
TAI/3/2024
TAI/1/2024
TAI/2/2024
TAI/5/2024
TAI/10/2024
MAY/1922/2024
TAI/9/2024
VIT/14/2024
MAY/1468/2023
VIT/19-35813-VL2495
VIT/19-35813-VL2494
VIT/19-35983
VIT/12/2020
MAY/127/2020
MAY/9/2020
LAO/3/2020
VIT/27/2019
LAO/2/2020
TAI/4/2020
LAO/5/2020
MAY/35/2020(2)
KAZ/2022
MAY/430/2020
VIT/20/2019
LAO/4/2020
VIT/28/2019
VIT/17/2019
VIT/7/2020
VIT/25/2019
VIT/23/2019
MAY/0588/2023
MAY/2555/2025
MAY/2532/2025
MAY/2538/2025
VIT/11/2025
VIT/13/2025
VIT/10/2025
VIT/12/2025
TAI/2/2023
MAY/006/2023
MAY/005/2023
TAI/1/2023
TAI/18/2022
MYA/9/2022
MAY/2430/2025
MAY/762/2025
MAY/944/2025
MAY/769/2025
MAY/2011/2024
MAY/039/2024
MAY/2009/2024
MAY/1864/2024
MAY/1925/2024
MAY/1084/2024
MYA/6/2022
MYA/4/2022
MYA/2/2020
MYA/5/2022
MYA/11/2022
MYA/10/2022
MYA/15/2022
MAY/2383/2024
MAY/2290/2024
MAY/2247/2024
MAY/2381/2024
TAI/13/2024
TAI/7/2024
TAI/4/2024
TAI/8/2024
TAI/12/2024
TAI/14/2024
MYA-19/Mgy/2019
MYA-20/Mgy/2019
MYA-18/Mgy/2019
MYA/14/2022
MYA/13/2022
MUR/19/2016
OMN/7/2001
IRN/18/2010
IRN/31/2009
IRN/88/2009
SRL/1/2019
LAO/2/2006
LAO/1/87
Manisa/TUR/69_(O1)
SUD/2/86
SYR/18/62
HKN/21/70
ISA/1/62_(O11)
0.0
0.1
0.2
0.3
0.4
e
b
BAL-09
FAR-09
ANT-10
Ind-2001
PanAsia-2
SA-2018
PanAsia
Tai-87
Syr-62
ME-SA
SEA
EA-3
WCSA-1
CATHAY
ISA-1

# Analysis Parameters

**Query sequence set:** WRLMEG/2026/000021
**Number of related sequences reported:** 69
**Number of prototype sequences in tree:** 13
**Minimal VP1 subsequence match length:** 610
**Sequence alignment length:** 635

**Number of sequences in tree capped at:** 100
**Sequence alignment method:** MAFFT 7.522
**Phylogeny reconstruction method:** IQ-TREE 2.26
**Number of bootstrap samples:** 1000
**Displaying bootstrap values above:** 75

## FMDV VP1 Sequences included in the Phylogenetic Tree

| Sequence Name | GenBank Accession | Host | Ref Lab | Country | FMDV Taxonomy | Pubmed Reference Number |
|---|---|---|---|---|---|---|
| TAI/2/2023 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/1/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/2/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/3/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/4/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/5/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/7/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/8/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/9/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/10/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/12/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/13/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/14/2024 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| MYA-18/Mgy/2019 * | LC603300 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA-19/Mgy/2019 * | LC603301 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA-20/Mgy/2019 * | LC604888 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/2/2020 * | LC815046 | Pig | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/4/2022 * | LC815047 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/5/2022 * | LC815048 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/6/2022 * | LC815049 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/9/2022 * | LC815051 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/10/2022 * | LC815052 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/11/2022 * | LC815053 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/13/2022 * | LC815054 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/14/2022 * | LC815055 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| MYA/15/2022 * | LC815056 | Cattle | NIAH-JAPAN | Myanmar | O/ME-SA/Ind-2001/e | 41200503 |
| VIT/14/2024 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/7/2025 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/10/2025 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/11/2025 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/12/2025 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/13/2025 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/12/2020 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/17/2019 | None | Pig | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/19-35813-VL2494 * | None | Cattle | RAHO6 | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/19-35813-VL2495 * | None | Cattle | RAHO6 | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/19-35983 * | None | Cattle | RAHO6 | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/20/2019 | None | Water Buffalo | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/23/2019 | None | Water Buffalo | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/25/2019 | None | Pig | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/27/2019 | None | Cattle | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/28/2019 | None | Water Buffalo | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| VIT/7/2020 | None | Pig | WRLFMD | Vietnam | O/ME-SA/Ind-2001/e | None |
| KAZ/2022 * | ON982227 | Cattle | ARRIAH | Kazakhstan | O/ME-SA/Ind-2001/e | None |
| LAO/2/2020 | None | Cattle | WRLFMD | Laos | O/ME-SA/Ind-2001/e | None |
| LAO/3/2020 | None | Cattle | WRLFMD | Laos | O/ME-SA/Ind-2001/e | None |
| LAO/4/2020 | None | Cattle | WRLFMD | Laos | O/ME-SA/Ind-2001/e | None |
| LAO/5/2020 | None | Cattle | WRLFMD | Laos | O/ME-SA/Ind-2001/e | None |
| MAY/9/2020 * | None | Cattle | MNFMDL | Malaysia | O/ME-SA/Ind-2001/e | None |
| MAY/35/2020(2) * | None | Cattle | MNFMDL | Malaysia | O/ME-SA/Ind-2001/e | None |
| MAY/127/2020 * | None | Cattle | MNFMDL | Malaysia | O/ME-SA/Ind-2001/e | None |
| MAY/430/2020 * | None | Cattle | MNFMDL | Malaysia | O/ME-SA/Ind-2001/e | None |
| TAI/4/2020 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/4/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/5/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/6/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/7/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/8/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/9/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/10/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/11/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/12/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |

## FMDV VP1 Sequences included in the Phylogenetic Tree *(continued)*

| Sequence Name | GenBank Accession | Host | Ref Lab | Country | FMDV Taxonomy | Pubmed Reference Number |
|---|---|---|---|---|---|---|
| TAI/13/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/15/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/17/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/18/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/19/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/20/2022 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |
| TAI/1/2023 | None | Cattle | WRLFMD | Thailand | O/ME-SA/Ind-2001/e | None |

* Not a WRLFMD Reference Number;
Not Available