



## FMD Genotyping Report

Lab Reference WRL batch Number: WRLFMD/2023/000012

Sender Details:



Date Received: 08/03/2023

Country of Origin\*: JORDAN

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

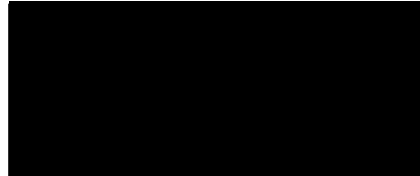
Results Approved By:



Date:

23/3/2023

Official Stamp:



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](mailto:reflabsfeedback@pirbright.ac.uk)).

\* Data supplied by the customer

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

## Genotyping Report

FMDV serotype: SAT2  
Country: Jordan  
Year: 2023  
Batch: WRLFMD/2023/000012  
No. of sequences: 23  
Report date: 22nd March 2023  
Report generated by: Nick Knowles  
Report checked by: Hayley Hicks



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www: <http://www.wrlfmd.org/>

email: [reporting@pirbright.ac.uk](mailto:reporting@pirbright.ac.uk)

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|   |   |
|---|---|
| Virus sample name:  | JOR/1/2023  |
| Sender reference:   | 142 (1)   |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 08/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK2   |
| Harvest date of material:   | 14/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52687, genome 52688, sequence viba_52689, sequencing info 52690 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/3/2023  |
| Sender reference:   | 143   |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 08/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52691, genome 52692, sequence viba_52693, sequencing info 52694 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/4/2023  |
| Sender reference:   | 20 (1)  |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 09/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52695, genome 52696, sequence viba_52697, sequencing info 52698 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/5/2023  |
| Sender reference:   | 20 (2)  |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 09/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52699, genome 52700, sequence viba_52701, sequencing info 52702 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/6/2023  |
| Sender reference:   | 36 (1)  |
| Location of origin:   | Zarqa City, Zarqa Governorate                               |
| Country of origin:  | Jordan  |
| Date of collection:   | 15/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 10/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52703, genome 52704, sequence viba_52705, sequencing info 52706 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/7/2023  |
| Sender reference:   | 36 (2)  |
| Location of origin:   | Zarqa City, Zarqa Governorate                               |
| Country of origin:  | Jordan  |
| Date of collection:   | 15/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 10/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52707, genome 52708, sequence viba_52709, sequencing info 52710 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |



|   |   |
|---|---|
| Virus sample name:  | JOR/8/2023  |
| Sender reference:   | 36 (3)  |
| Location of origin:   | Zarqa City, Zarqa Governorate                               |
| Country of origin:  | Jordan  |
| Date of collection:   | 15/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 10/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52711, genome 52712, sequence viba_52713, sequencing info 52714 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/9/2023  |
| Sender reference:   | 41  |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 18/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52715, genome 52716, sequence viba_52717, sequencing info 52718 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/10/2023   |
| Sender reference:   | 42  |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 18/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52719, genome 52720, sequence viba_52721, sequencing info 52722 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.2  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.8  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.8  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.6  | 0        | SAT2     | V        |         |            |
| viba_567 | ZIM/7/83         | bovine          | 73.3  | 0        | SAT2     | II       |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/11/2023   |
| Sender reference:   | 43  |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 18/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52723, genome 52724, sequence viba_52725, sequencing info 52726 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/12/2023   |
| Sender reference:   | 44  |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 18/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52727, genome 52728, sequence viba_52729, sequencing info 52730 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/13/2023   |
| Sender reference:   | 145   |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 20/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52731, genome 52732, sequence viba_52733, sequencing info 52734 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.2  | 0        | SAT2     | XIV      |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.2  | 0        | SAT2     | IX       |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.2  | 0        | SAT2     | XIII     |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.8  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.3  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 74.1  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 74.1  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.6  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.6  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.5  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/14/2023   |
| Sender reference:   | 59  |
| Location of origin:   | Khaldieh, Mafrag City, Mafrag Governorate                   |
| Country of origin:  | Jordan  |
| Date of collection:   | 23/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52735, genome 52736, sequence viba_52737, sequencing info 52738 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/16/2023   |
| Sender reference:   | 62  |
| Location of origin:   | Dulil, Zarqa City, Zarqa Governorate                        |
| Country of origin:  | Jordan  |
| Date of collection:   | 23/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52739, genome 52740, sequence viba_52741, sequencing info 52742 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |



|   |   |
|---|---|
| Virus sample name:  | JOR/17/2023   |
| Sender reference:   | 63 (1)  |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 23/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52743, genome 52744, sequence viba_52745, sequencing info 52746 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/18/2023   |
| Sender reference:   | 63 (2)  |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 23/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52747, genome 52748, sequence viba_52749, sequencing info 52750 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/19/2023   |
| Sender reference:   | 63 (3)  |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 23/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52751, genome 52752, sequence viba_52753, sequencing info 52754 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/20/2023   |
| Sender reference:   | 63 (4)  |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 23/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 11/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52755, genome 52756, sequence viba_52757, sequencing info 52758 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 83.9  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.2  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 74.9  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.5  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.0  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.8  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.8  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.6  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.3  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.2  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/22/2023   |
| Sender reference:   | 73 (2)  |
| Location of origin:   | Khaldieh, Mafrag City, Mafrag Governorate                   |
| Country of origin:  | Jordan  |
| Date of collection:   | 25/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52759, genome 52760, sequence viba_52761, sequencing info 52762 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/23/2023   |
| Sender reference:   | 71  |
| Location of origin:   | Khaldieh, Mafrag City, Mafrag Governorate                   |
| Country of origin:  | Jordan  |
| Date of collection:   | 25/01/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52763, genome 52764, sequence viba_52765, sequencing info 52766 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/25/2023   |
| Sender reference:   | 126   |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 06/02/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52767, genome 52768, sequence viba_52769, sequencing info 52770 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52709 | JOR/7/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

|   |   |
|---|---|
| Virus sample name:  | JOR/26/2023   |
| Sender reference:   | 127   |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 07/02/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52771, genome 52772, sequence viba_52773, sequencing info 52774 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 99.8  | 0        | SAT2     | XIV      |         |            |

#### 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_724 | ETH/2/91         | cattle          | 83.9  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.2  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 74.9  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.5  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.0  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.8  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.8  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.6  | 1        | SAT2     | III      |         |            |
| viba_193 | SUD/6/77         |                 | 73.5  | 0        | SAT2     | XIII     |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.3  | 0        | SAT2     | V        |         |            |



|   |   |
|---|---|
| Virus sample name:  | JOR/27/2023   |
| Sender reference:   | V127  |
| Location of origin:   | Halabat, Zarqa City, Zarqa Governorate                      |
| Country of origin:  | Jordan  |
| Date of collection:   | 07/02/2023  |
| Host species:   | cattle  |
| Serotype:   | SAT2  |
| Topotype:   | XIV   |
| Lineage:  |   |
| Sublineage:   |   |
| Sequence length:  | 642   |
| Ambiguities:  | 0   |
| Material submitted for sequencing:  | WRL-LFBK1   |
| Harvest date of material:   | 15/03/2023  |
| Primers:  | SAT2-1C445F & SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R |
| Received for sequencing:  | 20/03/2023  |
| Created:  | 22/03/2023  |
| Last updated:   | 22/03/2023  |
| VIBASys IDs: sample 52775, genome 52776, sequence viba_52777, sequencing info 52778 |   |

#### Most Closely Related Sequences

| sequence   | virus name  | Host   | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|------------|-------------|--------|-------|----------|----------|----------|---------|------------|
| viba_52765 | JOR/23/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52701 | JOR/5/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52689 | JOR/1/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52697 | JOR/4/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52761 | JOR/22/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52713 | JOR/8/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52693 | JOR/3/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52769 | JOR/25/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52705 | JOR/6/2023  | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |
| viba_52737 | JOR/14/2023 | cattle | 100.0 | 0        | SAT2     | XIV      |         |            |

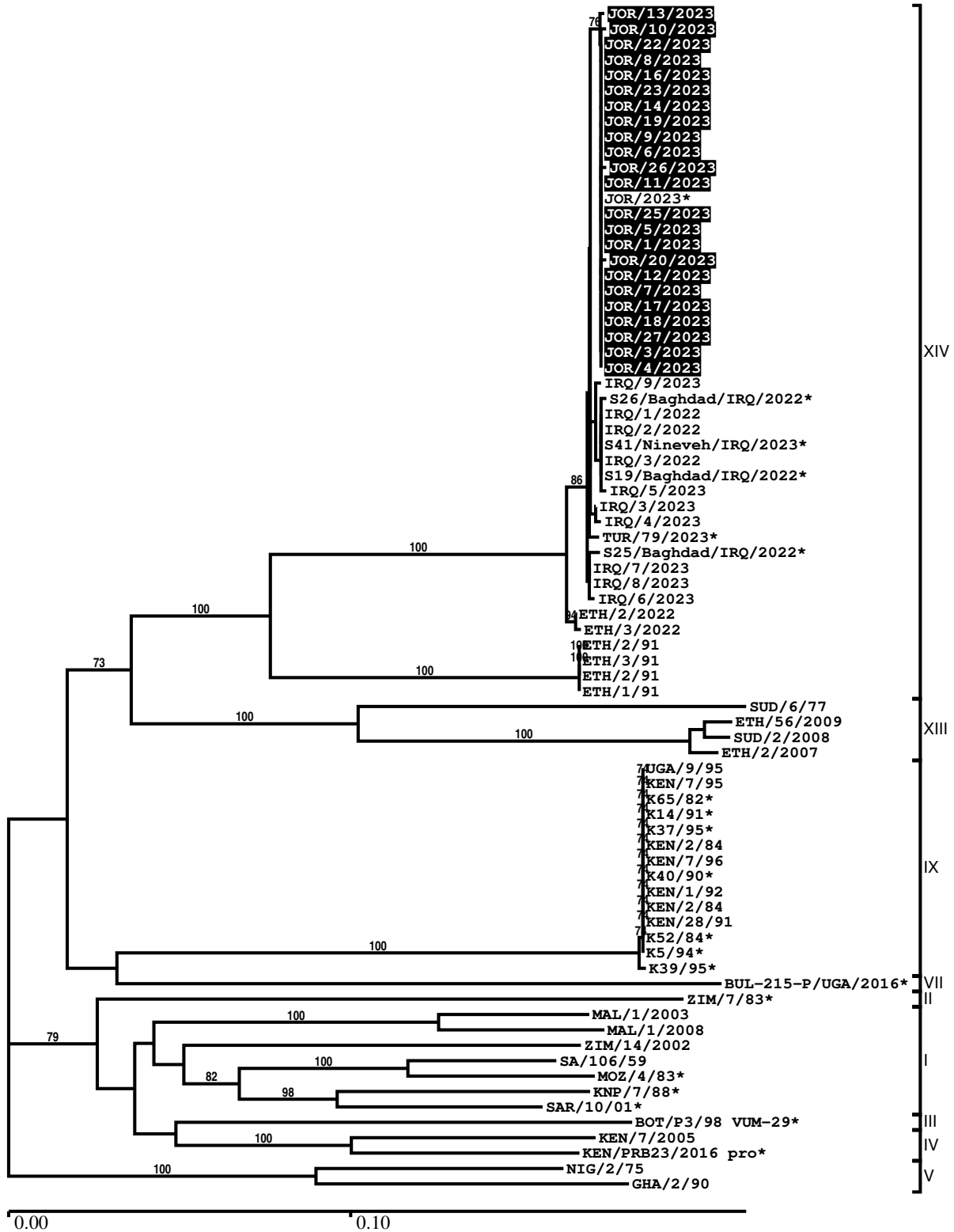
#### Most Closely Related Prototype Sequences

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

| sequence | virus name       | Host            | % Id. | # Ambig. | serotype | topotype | lineage | sublineage |
|----------|------------------|-----------------|-------|----------|----------|----------|---------|------------|
| viba_724 | ETH/2/91         | cattle          | 84.1  | 0        | SAT2     | XIV      |         |            |
| viba_139 | ETH/2/2007       | cattle          | 75.3  | 0        | SAT2     | XIII     |         |            |
| viba_470 | KEN/2/84         | bovine          | 75.1  | 0        | SAT2     | IX       |         |            |
| viba_500 | NIG/2/75         | bovine          | 74.7  | 0        | SAT2     | V        |         |            |
| viba_111 | MAL/1/2003       | bovine          | 74.2  | 0        | SAT2     | I        |         |            |
| viba_752 | SA/106/59        |                 | 73.9  | 0        | SAT2     | I        |         |            |
| viba_183 | ZIM/14/2002      | bovine          | 73.9  | 0        | SAT2     | I        |         |            |
| viba_451 | BOT/P3/98 VUM-29 | African buffalo | 73.7  | 1        | SAT2     | III      |         |            |
| viba_728 | GHA/2/90         | bovine          | 73.4  | 0        | SAT2     | V        |         |            |
| viba_193 | SUD/6/77         |                 | 73.4  | 0        | SAT2     | XIII     |         |            |

Report on FMDV SAT2 in Jordan in 2023

Batch: WRLFMD/2023/000012



\*, not a WRLFMD Reference Number

## Analysis Parameters

|  |   |
|--|---|
| VP1 subsequence extractor:             | vp1_SAT2                                      |
| Query sequence set:                    | WRLFMD/2023/000012-Jordan-SAT2 (23 sequences) |
| Sequence database set:                 | allseqs_SAT2 (1157 sequences)                 |
| Prototype sequence set:                | !prototypes_SAT2 (25 sequences)               |
| Number of related sequences reported:  | 10  |
| Minimal VP1 subsequence match length   | 600   |
| Sequence alignment method:             | muscle (default parameters)                   |
| Sequence alignment length:             | 642   |
| 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/SAT2

| label                 | accession | host(s)       | lab    | country | taxonomic information |
|-----------------------|-----------|---------------|--------|---------|-----------------------|
| JOR/13/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/10/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/22/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/8/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/16/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/23/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/14/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/19/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/9/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/6/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/26/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/11/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/2023*             | n/a       | cattle        | JUST   | Jordan  | XIV                   |
| JOR/25/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/5/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/1/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/20/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/12/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/7/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/17/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/18/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/27/2023           | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/3/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| JOR/4/2023            | n/a       | cattle        | WRLFMD | Jordan  | XIV                   |
| IRQ/9/2023            | n/a       | water buffalo | WRLFMD | Iraq    | XIV                   |
| S26/Baghdad/IRQ/2022* | n/a       | water buffalo | FMDI   | Iraq    | XIV                   |
| IRQ/1/2022            | n/a       | water buffalo | WRLFMD | Iraq    | XIV                   |
| IRQ/2/2022            | n/a       | water buffalo | WRLFMD | Iraq    | XIV                   |
| S41/Nineveh/IRQ/2023* | n/a       | cattle        | FMDI   | Iraq    | XIV                   |
| IRQ/3/2022            | n/a       | water buffalo | WRLFMD | Iraq    | XIV                   |
| S19/Baghdad/IRQ/2022* | n/a       | water buffalo | FMDI   | Iraq    | XIV                   |
| IRQ/5/2023            | n/a       | cattle        | WRLFMD | Iraq    | XIV                   |
| IRQ/3/2023            | n/a       | cattle        | WRLFMD | Iraq    | XIV                   |
| IRQ/4/2023            | n/a       | cattle        | WRLFMD | Iraq    | XIV                   |
| TUR/79/2023*          | n/a       | cattle        | FMDI   | Turkey  | XIV                   |
| S25/Baghdad/IRQ/2022* | n/a       | water buffalo | FMDI   | Iraq    | XIV                   |

*continued on next page*

| label               | accession | host(s)         | lab                 | country                  | taxonomic information |
|---------------------|-----------|-----------------|---------------------|--------------------------|-----------------------|
| IRQ/7/2023          | n/a       | cattle          | WRLFMD              | Iraq                     | XIV                   |
| IRQ/8/2023          | n/a       | cattle          | WRLFMD              | Iraq                     | XIV                   |
| IRQ/6/2023          | n/a       | cattle          | WRLFMD              | Iraq                     | XIV                   |
| ETH/2/2022          | n/a       | bovine          | WRLFMD              | Ethiopia                 | XIV                   |
| ETH/3/2022          | n/a       | bovine          | WRLFMD              | Ethiopia                 | XIV                   |
| ETH/2/91            | FJ798159  | cattle          | WRLFMD              | Ethiopia                 | XIV                   |
| ETH/3/91            | FJ798160  | cattle          | WRLFMD              | Ethiopia                 | XIV                   |
| ETH/2/91            | AY343938  | cattle          | OVI                 | Ethiopia                 | XIV                   |
| ETH/1/91            | FJ798158  | cattle          | WRLFMD              | Ethiopia                 | XIV                   |
| SUD/6/77            | AY343939  | n/a             | OVI                 | Sudan                    | XIII                  |
| ETH/56/2009         | KF112943  | cattle          | WRLFMD              | Ethiopia                 | XIII                  |
| SUD/2/2008          | GU566073  | cattle          | WRLFMD              | Sudan                    | XIII                  |
| ETH/2/2007          | FJ798161  | cattle          | WRLFMD              | Ethiopia                 | XIII                  |
| UGA/9/95            | AY343967  | n/a             | OVI                 | Uganda                   | IX                    |
| KEN/7/95            | AY343956  | n/a             | OVI                 | Kenya                    | IX                    |
| K65/82*             | HM623680  | n/a             | Makerere University | Kenya                    | IX                    |
| K14/91*             | HM623689  | n/a             | Makerere University | Kenya                    | IX                    |
| K37/95*             | HM623695  | n/a             | Makerere University | Kenya                    | IX                    |
| KEN/2/84            | n/a       | bovine          | WRLFMD              | Kenya                    | IX                    |
| KEN/7/96            | AY343959  | n/a             | OVI                 | Kenya                    | IX                    |
| K40/90*             | HM623688  | n/a             | Makerere University | Kenya                    | IX                    |
| KEN/1/92            | AY343953  | n/a             | OVI                 | Kenya                    | IX                    |
| KEN/2/84            | AY343941  | bovine          | OVI                 | Kenya                    | IX                    |
| KEN/28/91           | AY343948  | n/a             | OVI                 | Kenya                    | IX                    |
| K52/84*             | n/a       | n/a             | WRLFMD              | Kenya                    | IX                    |
| K5/94*              | HM623692  | n/a             | Makerere University | Kenya                    | IX                    |
| K39/95*             | HM623696  | n/a             | Makerere University | Kenya                    | IX                    |
| BUL-215-P/UGA/2016* | MH367452  | cattle          | PIADC               | Uganda                   | VII                   |
| ZIM/7/83*           | AF136607  | bovine          | OVI                 | Zimbabwe                 | II                    |
| MAL/1/2003          | n/a       | bovine          | WRLFMD              | Malawi                   | I                     |
| MAL/1/2008          | n/a       | cattle          | WRLFMD              | Malawi                   | I                     |
| ZIM/14/2002         | KF219689  | bovine          | WRLFMD              | Zimbabwe                 | I                     |
| SA/106/59           | AY593848  | n/a             | PIADC               | South Africa (SA)        | I                     |
| MOZ/4/83*           | AF367101  | n/a             | OVI                 | Mozambique               | I                     |
| KNP/7/88*           | AF367103  | African buffalo | OVI                 | South Africa (KNP)       | I                     |
| SAR/10/01*          | AY442912  | n/a             | OVI                 | Republic of South Africa | I                     |
| BOT/P3/98 VUM-29*   | AF367124  | African buffalo | OVI                 | Botswana                 | III                   |
| KEN/7/2005          | n/a       | cattle          | WRLFMD              | Kenya                    | IV                    |
| KEN/PRB23/2016 pro* | MH882624  | African buffalo | PIADC               | Kenya                    | IV                    |
| NIG/2/75            | AF367139  | bovine          | OVI                 | Nigeria                  | V                     |
| GHA/2/90            | AF479415  | bovine          | OVI                 | Ghana                    | V                     |

\*, not a WRLFMD Reference Number

n/a, not available