**Supplemental Data S1**

**RT-PCR**

Conventional RT-PCR assays were conducted for detection of FMDV nucleic acid using FMDV universal or serotype-specific primers (Table S1), QIAamp Viral RNA Mini Kit (Qiagen, Germany) for RNA extraction, and Verso™ one-step RT-PCR kit (Thermo scientific, Germany), according to manufacturers’ instructions. Egyptian FMDV strains (O pan Asia-2; A Iran 05, SAT2/EGY/2012), were used as positive controls for the RT-PCR assay. Nuclease free water was used in no-template control tubes. The reaction conditions were as mentioned in the original publications describing the primers (Table S1)

RT-PCR products were visualized in agarose gels strained with Ethidium Bromide after electrophoresis. The obtained DNA bands were purified using QIAquick Gel Extraction Kit (Qiagen, Germany), and sequenced using the same forward and reverse primers used in RT-PCR. The dideoxy chain-termination method was used.

The obtained nucleotide sequences were compared with FMDV sequences published in GenBank database using BLAST tool. Selected sequences were aligned and trimmed for analysis of nucleotide sequence identity using Clustal W(BioEdit Sequence Alignment Editor, version 7.2.5)

Table S1. FMD universal and serotype-specific primers used for RT-PCR. Oligonucleotide primers were synthesized by Metabion International AG (Germany).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Serotype | Name | Orientation | Sequence (5'- 3') | Product size (bp) | Reference |
| Universal | 1F | F | GCCTGGTCTTTCCAGGTCT | 328 | 5) |
| 1R | R | CCAGTCCCCTTCTCAGATC |
| A | A612 | F | TAGCGCCGGCAAAGACTTTGA | 813-816 | 3) |
| O | EA | F | CCTCCTTCAAYTACGGTG | 283 | 2) |
| A and O | EUR | R | GACATGTCCTCCTGCATCTGGTTGAT |  | 1) |
| SAT2 | 288 | F | GTAACCCGCTTTGCCATC | 288 | 4) |
| 288 | R | CGCGTCGAATCTGTCTCTG |

1. Algayed MA, Elgendy E, Hagag N, Shahin M, Ibrahim MS. Molecular characterization of FMD virus during 2016-2017 in Egypt. Eur J Pharm Med Res 5, 90-99, 2018.
2. Bachanek-Bankowska K, Mero HR, Wadsworth J, Mioulet V, Sallu R, Belsham GJ, Kasanga CJ, Knowles NJ, King DP. Development and evaluation of tailored specific Real-Time RT-PCR assays for detection of foot-and-mouth disease virus serotypes circulating in East Africa. J. Virol. Methods 237, 114–120, 2016.
3. El-Kholy AA, Soliman HM, Helmy NA, Rahman AO. A. genetic identification of the foot-and-mouth disease virus caused 2006 outbreak in Egypt. Arab J Biotech 10, 193–206, 2007.
4. Ibrahim MS, Ahmed LA, Kasem S, Hodhod AA. Molecular study on foot and mouth disease virus in Beheira governorate, Egypt during 2014. Alex. J Vet Sci 45, 2015.
5. Reid SM, Ferris NP, Hutchings GH, Samuel AR, Knowles NJ. Primary diagnosis of foot-and-mouth disease by reverse transcription polymerase chain reaction. J. Virol. Methods 89, 167–176, 2000.