# Supplementary Materials:

**S**upplemental Table 1 Abbreviations

| | |
|---|---|
| FMDV | Foot and Mouth Disease Virus |
| FMD | Foot and Mouth Disease |
| NC | Non-treated Control |
| DEGs | Differentially Expressed Genes |
| RNA-seq | High-throughput Sequencing of Mrna |
| RT-qPCR | Quantitative Real-time Reverse Transcriptase PCR |
| $TCID_{50}$ | 50% Tissue Culture Infective Doses |
| CPE | Cytopathic Effect |
| MOI | Multiplicity of Infection |
| DMEM | Dulbecco's Modified Eagle Medium |
| FBS | Fetal Bovine Serum |
| PBS | Phosphate Buffer Saline |
| QC | Quality Control |
| FPKM | Fragments per Kilo bases per Million fragments method |
| GO | Gene Ontology |
| KEGG | Kyoto Encyclopedia of Genes and Genomes |
| R | Pearson Correlation Coefficient |
| NFKBIA | NF-kappa-B Inhibitor alpha |
| IL6 | Interleukin 6 |
| CCL4 | C-C motif Chemokine 4 |
| CXCL2 | C-X-C motif Chemokine 2 |
| TNF | Tumor Necrosis Factor |
| VEGFA | Vascular Endothelial Growth Gactor A |
| CCL20 | C-C motif Chemokine 20 |
| CSF2 | Macrophage Colony-Stimulating Factor 2 |
| GADD45B | Growth Arrest and DNA Damage Inducible 45 beta |
| MYC | Myc proto-oncogene protein |
| FOS | Proto-oncogene c-Fos |
| MCL1 | Induced myeloid leukemia cell differentiation protein Mcl-1 |
| MAP3K14 | Mitogen-activated protein kinase kinase kinase 14 |
| IRF1 | Interferon regulatory factor 1 |
| CCL5 | C-C motif chemokine 5 |
| ZBTB3 | Zinc finger and BTB domain containing 3 |
| OTX1 | Orthodenticle homeobox 1 |
| TXNIP | Thioredoxin-interacting protein |
| ZNF180 | Znc Finger Protein 180 |
| ZNF36 | Znc Finger Protein 36 |
| ZNF182 | Zinc finger protein 182 |
| GINS3 | GINS complex subunit 3 |
| KLF15 | Kruppel-like factor 15 |

Supplemental Table 2 Primers for Verification of RNA-seq-detected DEGs with RT-qPCR

| | |
|---|---|
| **TNF** | **F:** CGACTCAGTGCCGAGATCAA **R:** CTCACAGGGCAATGATCCCA |
| **CCL20** | **F:** AGCAACTTTGACTGCTGCCT **R:** GATCTGCACACACGGCTAAC |
| **CXCL2** | **F:** CCACTGTGACCAAACGGAAG **R:** ATCAGTTGGCACTGCTCTTGT |
| **IL6** | **F:** TGGCAGAAAAAGACGGATGC **R:** ACAGCCTCGACATTTCCCTT |
| **CCL4** | **F:** ATGAAGCTCTGCGTGACTGT **R:** AGTCACGAAGTTGCGAGGAA |
| **TNFAIP3** | **F:** TCCTCTGAAGGTGGACGGAA **R:** ACCAGGGGGACAAAGTGTTG |
| **NFKBIE** | **F:** GCTGTGGCCTTGTGTGTTTT **R:** TGTCCCACTCACCAGGCTAT |
| **ZFP36** | **F:** CCTCCCGCTACAAGACTGAG **R:** ACTTGTGGCAGAGTTCCGTC |
| **CSF2** | **F:** TGCCATCAAAGAAGCCCTGA **R:** GCTCCTGGGGGTCAAACATT |
| **CCL3L1** | **F:** TTCCTCGCAAATTCGTAGCC **R:** CATTCAGCTCCAGGTCAGAGA |
| **CCL5** | **F:** GAAGAAATGGGTGCGGGAGT **R:** AAGTTTGCACGAGTTCAGGC |
| **EGR3** | **F:** CCTATACCACCACCCCAACG **R:** CGGGTGGATCTGCTTGTCTT |
| **MCL1** | **F:** CTCGAGTGATGGTCCACGTT **R:** ACGGTTCGATGCAGCTTTCT |
| **EGR1** | **F:** AGTTTGCCAGGAGCGATGAA **R:** AGGCCACACTTTTGTCTGCT |
| **SERPINE1** | **F:** AACCAGGCGGACTTCTCAAG **R:** TGCGGGCTGAGACGATAATG |
| **ATF3** | **F:** CTCTCGAATCCCAGCAGCAA **R:** CCCAGGTCCAAAGTCCACTC |
| **ICAM4** | **F:** GCCAGGATTACCGCCTACAA **R:** AGAGTCACCACAAGGAAGCC |
| **GADD45B** | **F:** GTGTCAGGAATGCAGCGACT **R:** GCATCTGTGTGAGGGTTCGT |
| **FOS** | **F:** GAGATGTCTGTGGCTTCCCT **R:** TCCATGCTGCTGACGTTCTT |
| **GINS3** | **F:** AACAAGCGGCGGATCCTTTC **R:** GAGCCGAACCCGTAGAAGTG |
| **ZNF182** | **F:** AGTTGTCCCAAAGCGGAAGT **R:** AGCCCATCACTCCTACCACT |
| **ZNF503** | **F:** ATGTTAGCTCCAAGCGGACC **R:** ATCTACAAGGGACGGGAGGG |
| **ZNF283** | **F:** TCTGAGGATTTTCCGGCTCT **R:** TTGAAGACACGGGAAAGGGAC |
| **ZNF180** | **F:** CAGCCAGAAGCGTAGCCATT **R:** GCACACGACAGACTAGGGTT |
| **ZKSCAN4** | **F:** TCCTTTACCTCTGGTGTGTGG **R:** GCAAACGGTCAACAAAGCCAT |
| **ZBTB3** | **F:** TTTCCCACGGACAAGGACAC **R:** CTTGCCCCCTTAACTAGCCC |
| **DYM** | **F:** GAGCAGCCCGAGGAGTTTTT **R:** CTGCGGGTTCCAGTATAGGC |
| **OTX1** | **F:** TTCCGTCGTCGTTGAGTACG **R:** GCATACACGATGCGTTGCTT |
| **TXNIP** | **F:** CATTGTGGTGCCCAAAGCTG **R:** GCCTCTGACCGATGACAACT |
| **KLF15** | **F:** CGACCCTGATGATGTCCCAA **R:** TTGCTGTGGCTTTCTGGGG |

**S**upplemental Table 3 Sample correlation coefficient matrix

| | **NC1** | **NC2** | **NC3** | **NC4** | **FMDV1** | **FMDV2** | **FMDV3** | **FMDV4** |
|---|---|---|---|---|---|---|---|---|
| NC1 | 1 | 0.981689339 | 0.978415833 | 0.97949195 | 0.962341549 | 0.960497019 | 0.962599115 | 0.95656192 |
| NC2 | 0.981689339 | 1 | 0.980418147 | 0.980903622 | 0.965636153 | 0.964933104 | 0.967204742 | 0.961261951 |
| NC3 | 0.978415833 | 0.980418147 | 1 | 0.981750033 | 0.963524847 | 0.961381466 | 0.963298739 | 0.95719982 |
| NC4 | 0.97949195 | 0.980903622 | 0.981750033 | 1 | 0.96724223 | 0.96557678 | 0.964897729 | 0.960085685 |
| FMDV1 | 0.962341549 | 0.965636153 | 0.963524847 | 0.96724223 | 1 | 0.985139979 | 0.980657688 | 0.979882408 |
| FMDV2 | 0.960497019 | 0.964933104 | 0.961381466 | 0.96557678 | 0.985139979 | 1 | 0.98210694 | 0.980679624 |
| FMDV3 | 0.962599115 | 0.967204742 | 0.963298739 | 0.964897729 | 0.980657688 | 0.98210694 | 1 | 0.981273647 |
| FMDV4 | 0.95656192 | 0.961261951 | 0.95719982 | 0.960085685 | 0.979882408 | 0.980679624 | 0.981273647 | 1 |

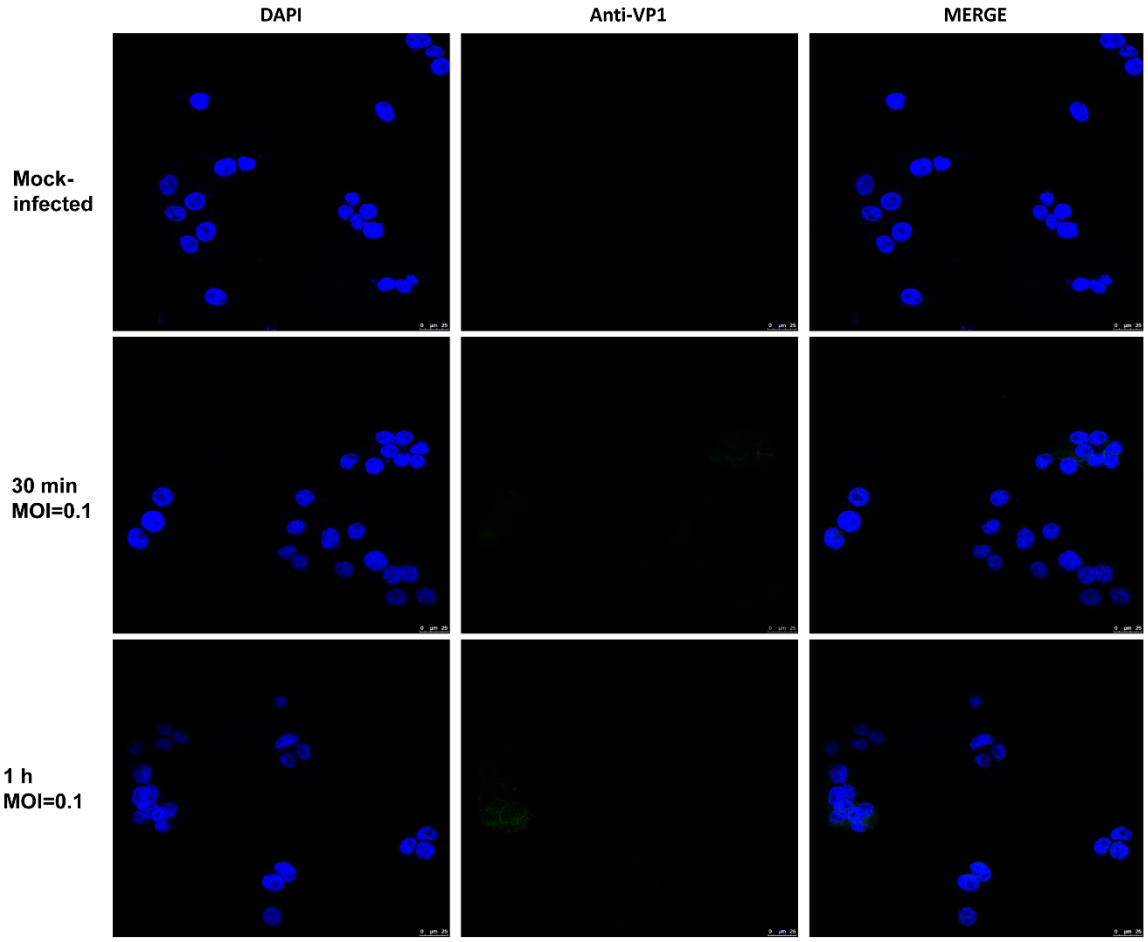


**Figure S1. Localization of FMDV at a lower magnification (40× 1.3 oil).** PK-15 cells were infected with FMDV (MOI 0.1) and confocal microscopy (with a 40 × 1.3 oil numerical aperture objective) was performed to detect the localization of FMDV. Anti-VP1 antibody was used to detect the capsid protein VP1, DAPI was used to show the nucleus.

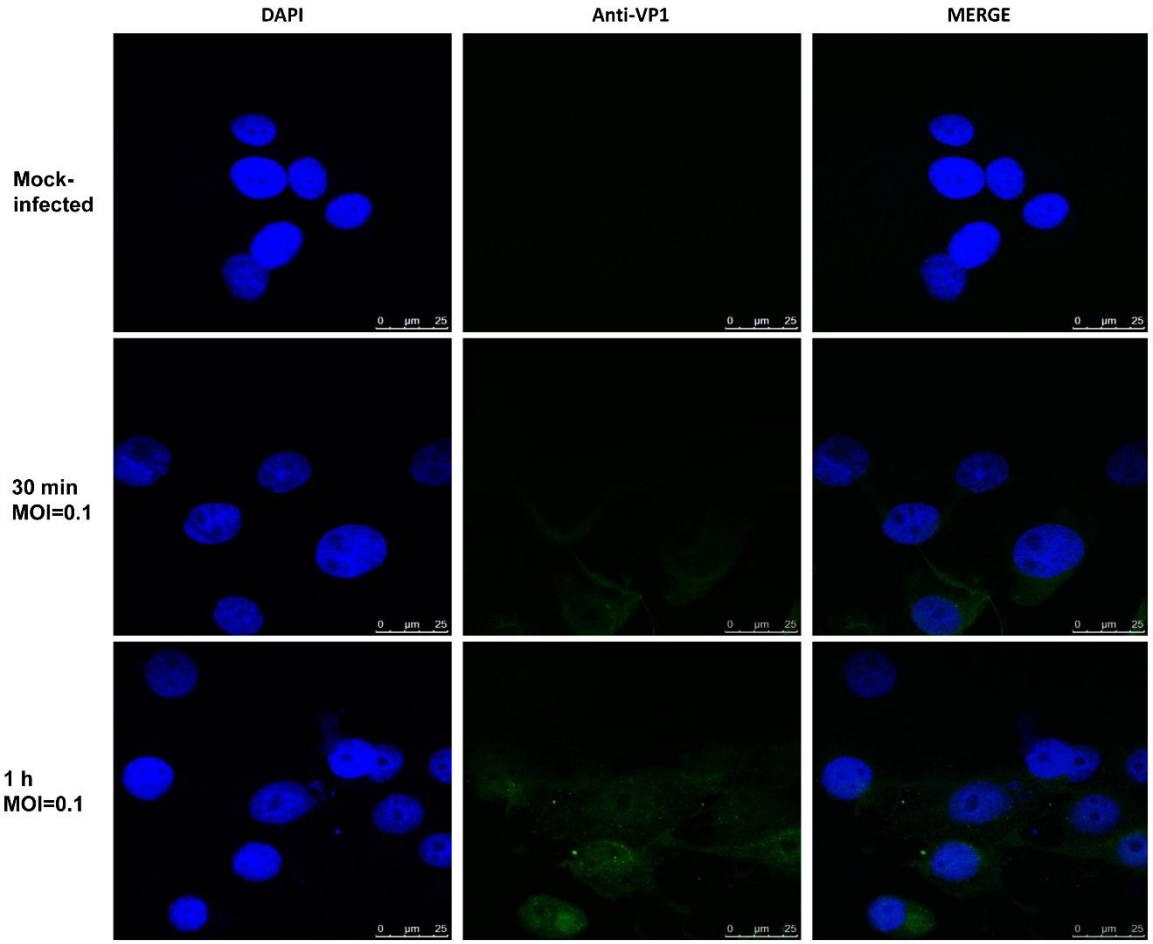


**Figure S2. Localization of FMDV at a higher magnification (100× 1.4 oil).** PK-15 cells were infected with FMDV (MOI 0.1) and confocal microscopy (with a 100 × 1.4 oil numerical aperture objective) was performed to detect the localization of FMDV. Anti-VP1 antibody was used to detect the capsid protein VP1, DAPI was used to show the nucleus.

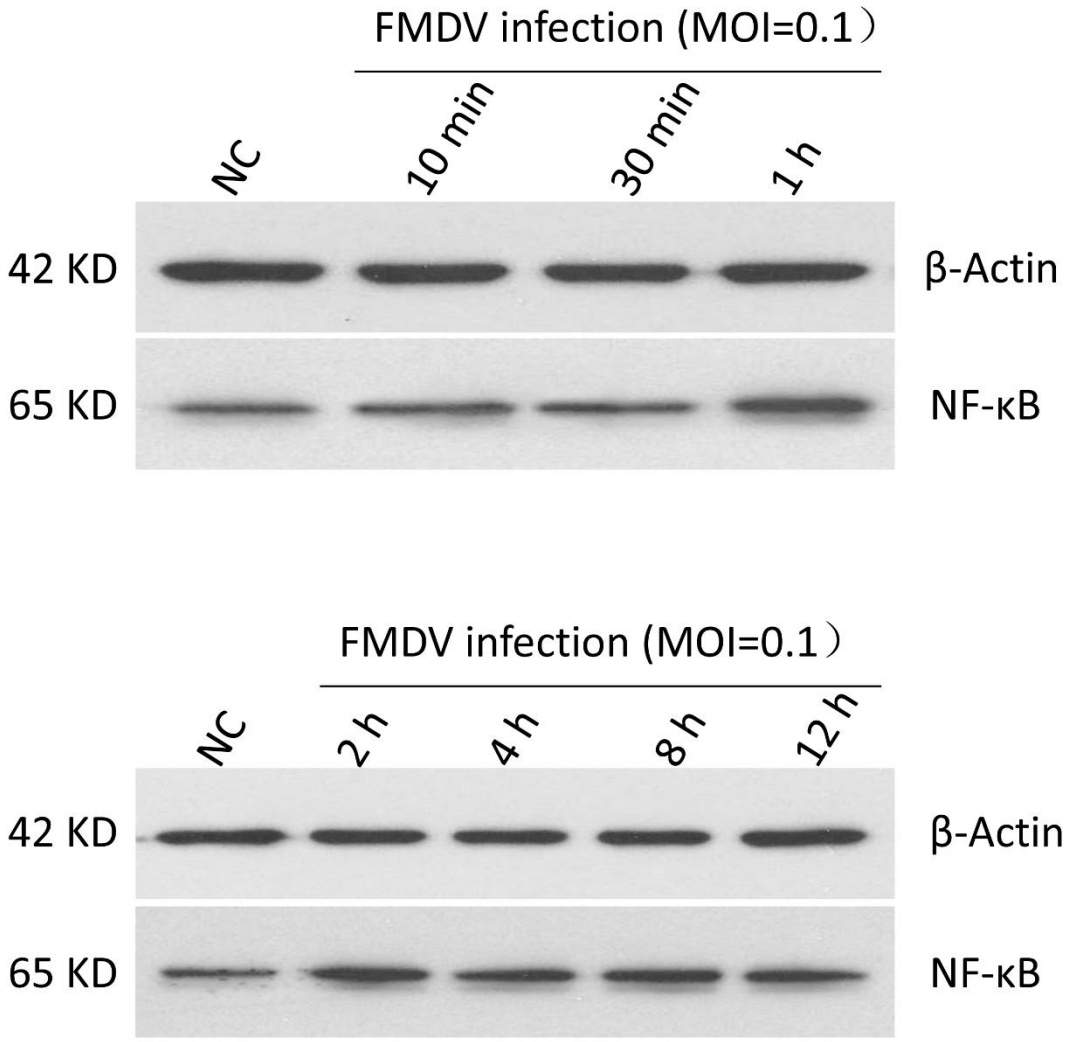


**Figure S3. Detection of NF-κB with Western Blotting.** PK-15 cells were infected with FMDV (MOI 0.1) and Western Blotting was performed to detect NF-κB expression from 10 min to 12 hours after infection, β-Actin was used as a loading control to show the evening loading of the samples.