**S. Table 1. Further comparative performances of Real-time RT-qPCR and RPA-LFD assays for positive BVDV-1 nucleic acid aerosol samples detected by the real time RT-PCR.**

|  |  |  |  |
| --- | --- | --- | --- |
| Herd No. | Number ofsamples | Real-time qPCR | **RPA-LFD** |
| P | P | N |
| A | 5 | 5 | 5 | 0 |
| B | 2 | 2 | 2 | 0 |
| C | 6 | 6 | 6 | 0 |
| D | 6 | 6 | 6 | 0 |
| E | 7 | 7 | 7 | 0 |
| F | 3 | 3 | 3 | 0 |
|  | 29 | 29 | 29 |  |

**S. Table 2.**

|  **The sequences used for this study** |
| --- |
| **GenBank****accession number** | **Strain** |
|  AM749198.1  | VE/76/05 |
|  AM749178.1  | TVM2/120/66 |
|  AM749177.1  |  PU/32/00 |
| AM749174.1 | MA/101/05 |
| AM749171.1  | ER/23/05 |
| AM749166.1 | LA/99/06 |
| AM749025.1 | UM/112/06 |
|  AM748724.1 | Buffalo 113/03 |
| AM709624.1 |  05/15 |
| KF205290.1 |  58-09 |
|  KF205281.1  | 21-12 |
|  MK059454.1 | JSXLY1712 |
|  KT833786.1 | 652TboUY/2014  |
| KF925520.1  | BJ1302  |
| JX966091.1  | TGL\_ca\_09  |
| JX966090.1  | ELV\_ca\_10  |
| JX966089.1 | AAB\_nb\_12  |
| JX966088.1 | RIB\_ca\_11 |
| FJ895328.1 | BR-UNESP-JAB 2 |
| JQ679457.1 | Ind S-18119 |
| EF683556.1 | 303 |
| EF683555.1 | ufms3 |
|  GU385896.1 | BJ5(09)  |
| LM994674.1 | SI/207/12 |
|  LM994673.1  | UM/136/08 |
| LM994672.1 | CA/181/10 |
|  LC054000.1 | IR-Isfahan-42 |
| LC053998.1 | Iran-Ahvaz-1 |
| KF434630.1 | KIRIKKALE90 |
| EU555287.1 | LTY |
|  FJ621582.1 | Yili |
| FJ621580.1 | Shihezi 2 |
|  FJ621577.1 | Hami 1 |
|  FJ621575.1 |  Akesu 1  |
| MN565878.1 | China/17142/2018 |
| MN417926.1 | T6-15-C  |
| MN417885.1 | T5-50 |
| MN417826.1 |  EN-19 |
| MG923949.1 |  42URU/2017 |
|  MN442383.1 | HN1918 |
|  MF803824.1 | BA1-2012 |
| MK982940.1 | ISF1979 |
| MN159203.1 | 3397CNESUY/2017 |
| MK622859.1 | 16M49  |
| MK381402.1 | 232-DA/18 |
| MK347344.1 | ET-94 |
| MK347342.1 | DO-48 |
| MK204920.1 | NMy1  |
| MK204905.1 | 810763 |
| MK170067.1 | BSC-1 |
| MG973218.1 | TR-Elz-Pst1  |
| MG913794.1 | TR-Erz-BV1 |
| MK127540.1 | Menofyia 2018 |
| MH673456.1 | TY8723 |
| MF803826.1 | GO-2013  |
| MH753471.1 | TR86 5' UTR |
| MG436781.1 | 12p  |
|  MF977722.1 | Ipixuna181\_buf  |
| MF124821.1 |  LV/N928/15 |
| KY985233.1 | 98sv48  |
| KY985219.1 | 606sv48  |
| KY941184.1 | BVDV1/WB3/Serbia/2017 |
|  KY865364.1 | HY-1 |
| KY865361.1 | WD-1 |
| KY886199.1 | S1118 |
| KY886197.1 | Mz/S1/14 |
| KY457411.1 | TNTIR16 |
| KY457410.1 | TNCBE16  |
| MG323525.1 | FS1426 |