**Supplementary file 1.** Primers used for amplification and sequencing of complete genome of DENV-2.

|  |  |  |
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| Fragment | Primer name | Sequence (5' - 3') |
| Fragment 1 | Den2 16F\* | TGGACCGACAAAGACAGATTCTTTG |
|  | Den2 348F | CAGGAAAGAGATTGGAAGGATGC |
|  | Den2 738F | AATGGGACTGGAGACACGAACTG |
|  | Den2 934R | TCATTGAAGGAGCGACAGC |
|  | Den2 1169R\* | CCTTGTGTTGGGCAGCGAGAT |
| Fragment 2 | Den2 771F\* | ACATGGATGTCRTCAGAAGG |
|  | Den2 1353F | GTGATAACACCTCACTCAGGG |
|  | Den2 1596R | CCATGGTAACGGCAGGTC |
|  | Den2 2540R\* | GAAGGGGATTCTGGTTGG |
| Fragment 3 | Den2 2146F\* | ACAACAATGAGAGGAGCGAAGAG |
|  | Den2 2796F | CACAGAACTTCATAACCACACCT |
|  | Den2 3222R | GGGTCCTGCCGTTTGTGTATGAT |
|  | Den2 3865R | CTAAAGCCAACGCGTCAGTCAGT |
|  | Den2 3545F | TCAGGACCCGAGTAGGAACGAA |
|  | Den2 4590R\* | ATAGGCTCCATCTTCCAGTTCAG |
| Fragment 4 | Den2 4158F\* | GGCAGTCGGGATGGTGAGC |
|  | Den2 4539F | TGTCCCTTCACCCCCACCTGT |
|  | Den2 4590R | ATAGGCTCCATCTTCCAGTTCAG |
|  | Den2 4773R | CTTCCAGCCTCCTCCATACGATA |
|  | Den2 5403R | TATGCTTGCTGGGTCTGTGAAAT |
|  | Den2 5784R\* | CCTCTCGGCCTTGAAGTTAGCAC |
| Fragment 5 | Den2 5443F\* | GAAGCAGCTGGGATTTTTATGAC |
|  | Den2 6072R | GTCCACCTTTTCACGCTCTG |
|  | Den2 6359F | TCGCAGCTGGAAGAAAGTC |
|  | Den2 6776R | AATTGGTTATCTTGGGGTGTTC |
|  | Den2 7161R | GAGAAGGGCTGCTGTGAGAGTTA |
|  | Den2 7733R\* | ACAGCGTGATGGTCCGTTTCT |
| Fragment 6 | Den2 7416F\* | AACCGGGCCCATCTCTACACTG |
|  | Den2 7926F | CGGTTGGAATCTGGTGCGTCTT |
|  | Den2 8181R | AGCTCCTCCGTATTTCCTTTGT |
|  | Den2 8327F | AGCCAGATGTTGACCTCGGAAGT |
|  | Den2 8847R | AACAGCCTCACGTGCCGACTT |
|  | Den2 9154R\* | CTCCTCCTTCTTTCTTACTCACG |
| Fragment 7 | Den2 8662F\* | GAACCGAAAGAAGGCACGAAAAA |
|  | Den2 9599R | GCGCTTGCAAACCTGTCATCTAA |
|  | Den2 8967F | CAAAGCAAAAGGCAGCAGAGC |
|  | Den2 9821F | CAGCCTGTTTGGGGAAGTCT |
|  | Den2 10321R\* | GGCTTAATCCGACCTGACTTCTG |

Amplification primers are denoted by asterisks. The remaining primers, together with amplification primers were used for sequencing.

**Amplification protocol**

|  |  |  |
| --- | --- | --- |
| **PCR conditions - Fragments 1 - 7** | | |
| **Temperature °C** | **Time** | **Cycle** |
| 98 °C | 10 sec | 1 |
| 98 °C | 5 sec | 35 |
| 62 °C (F2 & F6)  65 °C (F1, F3, F4, F5 & F7) | 10 sec |
| 72 °C | 45 sec |
| 72 °C | 2 min | 1 |
| 20 °C | infinity | 1 |

Each fragment was PCR amplified by using 0.5 µM of fragment-specific primers and 1X PhusionTM Flash High-Fidelity PCR Master Mix (Thermo Fisher Scientific, MA, USA).