

Genomic RNA from Dengue Virus Type 1, UIS 998

Catalog No. NR-50530

Product Description:

Genomic RNA was isolated from a preparation of cell lysate and supernatant from *Aedes albopictus* mosquito larval epithelial cells (clone C6/36; ATCC® CRL-1660™) infected with dengue virus type 1 (DEN-1), UIS 998 (BEI Resources lot 70047467) using QIAamp® Viral RNA Mini Kit (Qiagen® 52906). The viral genomic RNA is in a background of cellular nucleic acid and carrier RNA.

Lot: 70053410

Manufacturing Date: 13JUN2022

TEST	SPECIFICATIONS	RESULTS
Genotypic Analysis Sequencing of species-specific region (~ 900 nucleotides)	≥ 98% identity with DEN-1	99.1% identity with DENV-1/CO/BID-V3390/2007 (GenBank: GQ868569) ¹
Functional Activity by RT-PCR Amplification²	~ 1000 base pair amplicon	~ 1000 base pair amplicon (Figure 1)
Estimated Concentration (post-dilution) by RiboGreen® Measurement (Viral, Cellular and Carrier)³	Report results	0.9 ng per 100 µL (0.009 µg per mL)
Estimated Amount per Vial³	Report results	0.9 ng
Virus Inactivation 10% of total yield inoculated on C6/36 cells and evaluated for cytopathic effect and fluorescent antibody after serial passage ⁴	No viable virus detected	No viable virus detected

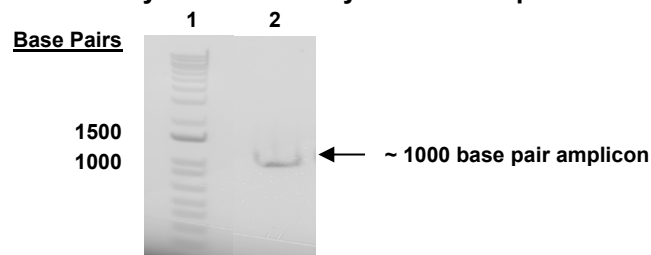
¹Sequence information for DEN-1, UIS 998 is not available in the NCBI database; nucleotide sequence obtained for lot 70053410 is ~ 99% identical to DENV-1/CO/BID-V3390/2007 (GenBank: GQ868569), a DEN-1 strain that was also isolated in Santander, Colombia in 2007.

²Amplified using iTaq™ Universal SYBR Green One-step Kit (Bio-Rad® 172-5151) with 5 µL of NR-50530 in a 50 µL reaction

³Measurement is determined pre-vial prior to dilution due to the limit of detection of the quantification method

⁴Use of the QIAamp® Viral RNA Mini Kit has been demonstrated to consistently inactivate 100% of DENV-1 as shown by the absence of cytopathic effect (CPE) and fluorescent antibody using Millipore mouse anti-dengue complex (cat no. MAB8705) after plating the entire extract on virus-susceptible cells for two passages.

Figure 1: Functional Activity of NR-50530 by RT-PCR Amplification



Lane 1: Invitrogen™ TrackIt™ 1 Kb Plus DNA Ladder
Lane 2: PCR product from 1 µL of NR-50530

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