Dengue Virus Type 2, DKA 8521

Catalog No. NR-49749

For research use only. Not for human use.

Contributor:
World Reference Center for Emerging Viruses and Arboviruses, University of Texas Medical Branch, Galveston, Texas, USA

Manufacturer:
BEI Resources

Product Description:

Virus Classification: *Flavivirus, Flaviviridae*
Species: Dengue virus type 2
Strain/Isolate: DKA 8521
Original Source: Dengue virus type 2 (DEN-2), DKA 8521 was isolated from a human in Malaysia in 2009, and contributed to WRCEVA by Nikos Vasilakis of the Department of Pathology, Center for Biodefense and Emerging Infectious Diseases, University of Texas Medical Branch, Galveston, Texas, USA. In order to remove contaminating mycoplasma, the first viral passage at BEI Resources was performed by lipofectamine-mediated transfection of extracted viral RNA.

Dengue virus causes the most common vector-borne viral disease of humans, with over 50 million cases in tropical and subtropical regions each year. The disease is now endemic in over 110 countries in the world, with Southeast Asia and the Western Pacific being the most seriously affected. Dengue disease is caused by one of four closely related, but antigenically distinct serotypes (designated DEN-1 to -4). Infections produce a spectrum of clinical illness ranging from a nonspecific viral syndrome to severe and fatal hemorrhagic disease. Humans are the major host of dengue virus, with Aedes mosquitoes as the principal vectors.

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from *Aedes albopictus* mosquito larval epithelial cells (clone C6/36; ATCC® CRL-1660™™) infected with dengue virus type 2, DKA 8521.

Note: If homogeneity is required for your intended use, please purify prior to initiating work.

Packaging/Storage:
NR-49749 was packaged aseptically in screw-capped plastic cryovials. The product is provided frozen and should be stored at -60°C or colder immediately upon arrival. For long-term storage, the vapor phase of a liquid nitrogen freezer is recommended. Freeze-thaw cycles should be avoided.

Growth Conditions:

Host: *Aedes albopictus* clone C6/36 cells (ATCC® CRL-1660™)
Growth Medium: Eagle’s Minimum Essential Medium containing Earle’s Balanced Salt Solution, non-essential amino acids, 2 mM L-glutamine, 1 mM sodium pyruvate and 1.5 g/L of sodium bicarbonate supplemented with 2% fetal bovine serum, or equivalent
Infection: Cells should be 80% to 90% confluent
Incubation: 5 to 11 days at 28°C and 5% CO₂
Cytopathic Effect: Inconsistent; cell rounding, enlargement, and/or detachment may or may not be observed. Confirmation of viral replication by immunofluorescence is recommended.

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH, as part of the WRCEVA program: Dengue Virus Type 2, DKA 8521, NR-49749."

Biosafety Level: 2


Disclaimers:
You are authorized to use this product for research use only. It is not intended for human use.

Use of this product is subject to the terms and conditions of the BEI Resources Material Transfer Agreement (MTA). The MTA is available on our Web site at www.beiresources.org.

While BEI Resources uses reasonable efforts to include accurate and up-to-date information on this product sheet, neither ATCC® nor the U.S. Government makes any warranties or representations as to its accuracy. Citations from scientific literature and patents are provided for informational purposes only. Neither ATCC® nor the U.S. Government warrants that such information has been confirmed to be accurate.

This product is sent with the condition that you are responsible for its safe storage, handling, use and disposal. ATCC® and the U.S. Government are not liable for any damages or injuries arising from receipt and/or use of this product. While reasonable effort is made to ensure authenticity and reliability of materials on deposit, the U.S. Government, ATCC®, their suppliers and contributors to BEI Resources are not liable for damages arising from the misidentification or misrepresentation of products.
Product Information Sheet for NR-49749

Use Restrictions:
This material is distributed for internal research, non-commercial purposes only. This material, its product or its derivatives may not be distributed to third parties. Except as performed under a U.S. Government contract, individuals contemplating commercial use of the material, its products or its derivatives must contact the contributor to determine if a license is required. U.S. Government contractors may need a license before first commercial sale.

References:
1. Tesh, R. B., Personal Communication.

ATCC® is a trademark of the American Type Culture Collection.