Dengue Virus Type 1, DENV-1/VN/BID-V1792/2007

Catalog No. NR-44083

For research use only. Not for human use.

Contributor:
Cameron P. Simmons, Ph.D., Oxford University Clinical Research Unit, Hospital for Tropical Diseases, Ho Chi Minh City, Vietnam

Manufacturer:
BEI Resources

Product Description:

Virus Classification: Flaviviruses, Flaviviridae
Species: Dengue virus type 1
Original Source: Dengue virus type 1, DENV-1/VN/BID-V1792/2007 was isolated from a human in Vietnam on August 9, 2007.1,2 The complete genome of dengue virus type 1, DENV-1/VN/BID-V1792/2007 has been sequenced (GenBank: FJ432734).2

Dengue virus causes the most common vector-borne viral disease of humans, with over 50 million cases in tropical and subtropical regions each year.3 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).3 Infections produce a spectrum of clinical illnesses ranging from a nonspecific viral syndrome to severe and fatal hemorrhagic disease.4,5 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 1, DENV-1/VN/BID-V1792/2007.

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

Packaging/Storage:
NR-44083 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 70% to 90% confluent
Incubation: 7 to 11 days at 28°C and 5% CO2
Cytopathic Effect: Cell enlargement and detachment from monolayer

Citation:
Acknowledgment for publications should read “The following reagent was obtained through BEI Resources, NIAID, NIH: Dengue Virus Type 1, DENV-1/VN/BID-V1792/2007, NR-44083.”

Biosafety Level: 2

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References:
1. Simmons, C. P., Personal Communication.

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