Dengue Virus Type 1, TH-Sman

Catalog No. NR-83
(Derived from ATCC® VR-344™)

For research use only. Not for human use.

Contributor:
ATCC®

Manufacturer:
BEI Resources

Product Description:
Virus Classification: *Flaviviridae*, *Flavivirus*
Agent: Dengue virus type 1 (DEN-1)
Strain/Isolate: TH-Sman
Original Source: Isolated in 1958 by Dr. Sman Vardhanabhuti from the serum of a patient diagnosed with Thai hemorrhagic fever in Bangkok, Thailand[1]
Comments: DEN-1, TH-Sman was deposited at ATCC® by Dr. William McD. Hammon of the Department of Epidemiology and Microbiology, Graduate School of Public Health, University of Pittsburgh, Pittsburgh, Pennsylvania.

Dengue virus causes the most common vector-borne viral disease of humans, with over 50 million cases in tropical and subtropical regions each year.[2] 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).[2] Infections produce a spectrum of clinical illness ranging from a nonspecific viral syndrome to severe and fatal hemorrhagic disease.[3,4] Humans are the major host of dengue virus, with *Aedes aegypti* mosquitoes the principal vectors.

Material Provided:
Each vial contains approximately 1 mL of cell lysate and supernatant from *Cercopithecus aethiops* kidney epithelial cells (Vero; ATCC® CCL-81™) infected with DEN-1, TH-Sman.

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

Packaging/Storage:
NR-83 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: Vero cells (ATCC® CCL-81™)
Growth Medium: Minimum Essential Medium supplemented with 2% irradiated fetal bovine serum, or equivalent
Infection: Cells should be 50% to 60% confluent
Incubation: 6 to 9 days at 37°C and 5% CO_2
Cytopathic Effect: Refractile cell rounding, if any

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Dengue Virus Type 1, TH-Sman, NR-83."

Biosafety Level: 2
Appropriate safety procedures should always be used with this material. Laboratory safety is discussed in the following publication: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, and National Institutes of Health. Biosafety in Microbiological and Biomedical Laboratories. 5th ed. Washington, DC: U.S. Government Printing Office, 2009; see www.cdc.gov/biosafety/publications/bmbl5/index.htm.

Disclaimers:
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