

SUPPORTING INFECTIOUS DISEASE RESEARCH

Product Information Sheet for NR-44087

Dengue Virus Type 3, DENV-3/VN/BID-V1329/2006

Catalog No. NR-44087

For research use only. Not for use in humans.

Contributor:

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Manufacturer:

BEI Resources

Product Description:

Virus Classification: Flaviviridae, Flavivirus

Species: Dengue virus type 3

Strain/Isolate: DENV-3/VN/BID-V1329/2006

Original Source: Dengue virus type 3, DENV-3/VN/BID-V1329/2006 was isolated from a human in Vietnam on

December 13, 2006.1,2

<u>Comments</u>: The complete genome of dengue virus type 3, DENV-3/VN/BID-V1329/2006 has been sequenced

(GenBank: <u>EU660409</u>).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 illness 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 1.0 mL of cell lysate and supernatant from *Aedes albopictus* clone C6/36 cells infected with dengue virus type 3, DENV-3/VN/BID-V1329/2006.

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

Packaging/Storage:

NR-44087 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:

<u>Host</u>: 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 10 days at 28°C and 5% CO₂

Cytopathic Effect: Inconsistent; cell enlargement, rounding, and detachment may or may not be observed.

Citation:

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Dengue Virus Type 3, DENV-3/VN/BID-V1329/2006, NR-44087."

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 (BMBL). Current Edition. Washington, DC: U.S. Government Printing Office.

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license is required. U.S. Government contractors may need a license before first commercial sale.

References:

- 1. Simmons, C. P., Personal Communication.
- 2. Henn, M. R., et al. Broad Institute of MIT and Harvard, Cambridge, MA, USA. Direct Submission.
- Holmes, E. C. and S. S. Twiddy. "The Origin, Emergence and Evolutionary Genetics of Dengue Virus." <u>Infect.</u> <u>Genet. Evol.</u> 3 (2003): 19-28. PubMed: 12797969.
- Malavige, G. N., et al. "Dengue Viral Infections." <u>Postgrad.</u> Med. J. 80 (2004): 588-601. PubMed: 15466994.
- Kao, C. L., et al. "Laboratory Diagnosis of Dengue Virus Infection: Current and Future Perspectives in Clinical Diagnosis and Public Health." <u>J. Microbiol. Immunol. Infect.</u> 38 (2005): 5-16. PubMed: 15692621.

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