

**Monoclonal Anti-Dengue Virus Type 1 Envelope Protein, Clone E42 (produced *in vitro*)**

**Catalog No. NR-9550**

**For research use only. Not for human use.**

**Contributor:**

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**Manufacturer:**

NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH

**Product Description:**

Antibody Class: IgG1κ  
 Mouse monoclonal antibody prepared against the envelope glycoprotein of dengue virus type 1 (DEN-1) was purified from clone E42 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of P3X63.Ag.8.6.5.3 BALB/c mouse myeloma cells with immunized mouse splenocytes. The clone E42 antibody is reported to bind to domain III in the envelope glycoprotein.

**Material Provided:**

Each vial of NR-9550 contains approximately 100 µL of purified monoclonal antibody in PBS. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

**Packaging/Storage:**

NR-9550 was packaged aseptically in screw-capped plastic cryovials and is provided frozen on dry ice. NR-9550 should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

**Functional Activity:**

NR-9550 is reactive in immunofluorescence assays using Vero cells infected with DEN-1 and by ELISA using DEN-1-infected cell lysates (DEN-1, Hawaii; BEI Resources NR-82). The antibody is reported to have weak neutralizing activity, to be reactive using flow cytometry, and to cross-react weakly with dengue virus types 2 and 3.<sup>1</sup>

**Biosafety Level: 1**

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, 2007; see [www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm](http://www.cdc.gov/od/ohs/biosfty/bmb15/bmb15toc.htm).

**Citation:**

Acknowledgment for publications should read “The following reagent was obtained through the NIH Biodefense and Emerging Infections Research Resources Repository, NIAID, NIH: Monoclonal Anti-Dengue Virus Type 1 Envelope Protein, Clone E42 (produced *in vitro*), NR-9550.”

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**References:**

1. M. S. Diamond, personal communication.

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