

**Monoclonal Anti-Dengue Virus Type 4 Envelope Protein, Clone E40 (produced *in vitro*)**

**Catalog No. NR-15547**

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

**Contributor:**

Michael S. Diamond, M.D., Ph.D., Departments of Medicine, Molecular Microbiology, Pathology and Immunology, Washington University School of Medicine, Saint Louis, Missouri, USA

**Manufacturer:**

BEI Resources

**Product Description:**

Antibody Class: IgG2ak

Mouse monoclonal antibody prepared against the envelope protein of dengue virus type 4 (DEN-4) was purified from clone E40 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of P3X63Ag8.653 myeloma cells with immunized mouse splenocytes. The clone E40 antibody is reported to bind to domain III (DIII) in the envelope protein.<sup>1</sup>

**Material Provided:**

Each vial of NR-15547 contains approximately 0.1 mL of purified monoclonal antibody in PBS. The concentration, expressed as mg per mL, is shown on the Certificate of Analysis.

**Packaging/Storage:**

NR-15547 was packaged aseptically in screw-capped plastic cryovials and is provided frozen on dry ice. The item should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

**Functional Activity:**

NR-15547 is reactive on C6/36 cells infected with DEN-4, D85-019 (BEI Resources NR-3804) in indirect immunofluorescence assays. See Certificate of Analysis for details. The antibody is reported to be type-specific, neutralizing, and to react with DEN-4 DIII expressed on yeast cells.<sup>1</sup>

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Dengue Virus Type 4 Envelope Protein, Clone E40 (produced *in vitro*), NR-15547."

**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, 2009; see [www.cdc.gov/biosafety/publications/bmbl5/index.htm](http://www.cdc.gov/biosafety/publications/bmbl5/index.htm).

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**References:**

1. Sukupolvi-Petty, S., et al. "Functional Analysis of Antibodies against Dengue Virus Type 4 Reveals Strain-Dependent Epitope Exposure that Impacts Neutralization and Protection." J. Virol. 87 (2013): 8826-8842. PubMed: 23785205.

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