

Monoclonal Anti-West Nile Virus Envelope Protein, Clone E58 (produced *in vitro*)

Catalog No. NR-10138

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: IgG2ak
 Mouse monoclonal antibody prepared against the envelope glycoprotein of West Nile virus (WNV) was purified from clone E58 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of P3X63.Ag8.53 BALB/c mouse myeloma cells with immunized mouse splenocytes. The clone E58 antibody is reported to bind to domain III in the envelope glycoprotein.^{1,2}

Material Provided:

Each vial of NR-10138 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-10138 was packaged aseptically in screw-capped plastic cryovials and is provided frozen on dry ice. NR-10138 should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:

NR-10138 is reactive in immunofluorescence assays using Vero cells infected with WNV and by ELISA using WNV-infected cell lysates [WNV, Eg101 (Egypt 1951); BEI Resources NR-676]. The antibody is reported to be strongly neutralizing¹ and reactive using flow cytometry and Western blot analysis.³

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.

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-West Nile Virus Envelope Protein, Clone E58 (produced *in vitro*), NR-10138.”

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References:

1. Oliphant, T., et al. “Development of a Humanized Monoclonal Antibody with Therapeutic Potential against West Nile Virus.” *Nat. Med.* 11 (2005): 522-530. PubMed: 15852016.
2. Oliphant, T., et al. “Antibody Recognition and Neutralization Determinants on Domains I and II of West Nile Virus Envelope Protein.” *J. Virol.* 80 (2006): 12149-12159. PubMed: 17035317.
3. M. S. Diamond, personal communication.

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