Monoclonal Anti-Human Interferon Beta Protein, Clone A7 (produced *in vitro*)

Catalog No. NR-15260

For research use only. Not for use in humans.

Contributor:
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Manufacturer:
BEI Resources

Product Description:
Antibody Class: IgG2aκ
Mouse monoclonal antibody prepared against a recombinant form of the human interferon beta (IFN-β) protein was purified from clone A7 hybridoma supernatant by protein G affinity chromatography. The B cell hybridoma was generated by the fusion of P3X63Ag8.653 myeloma cells with splenocytes from a BALB/c x DBA F1 mouse immunized repeatedly with recombinant human IFN-β protein in adjuvant.[1] The clone A7 antibody is specific for human IFN-β and does not cross-react with IFN-α or IFN-γ.

Material Provided:
Each vial of NR-15260 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-15260 was packaged aseptically in screw-capped plastic vials and is provided frozen on dry ice. The product should be stored at -20°C or colder immediately upon arrival. Freeze-thaw cycles should be avoided.

Functional Activity:
NR-15260 recognizes recombinant human IFN-β in western blot assays. The clone A7 monoclonal antibody is also reported to function in ELISA, and to neutralize the anti-viral and anti-proliferative effects of unglycosylated recombinant IFN-β, but not of glycosylated natural IFN-β.[1,2] The clone A7 antibody has been shown to recognize an epitope in the C1 helix of the IFN-β molecule, a site distant from the interferon α/β receptor subunit 2 (INFAR-2) binding residues.[2]

Citation:
Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Human Interferon Beta Protein, Clone A7 (produced *in vitro*), NR-15260."

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.

Disclaimers:
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References:
1. Redlich, P. N. and S. E. Grossberg. "Analysis of Antigenic Domains on Natural and Recombinant Human IFN-β by the Inhibition of Biologic Activities with Monoclonal Antibodies." J. Immunol. 143 (1989): 1887-1893. PubMed: 2476486.
2. Runkel, L., et al. "Mapping of IFN-β Epitopes Important for Receptor Binding and Biologic Activation: Comparison of Results Achieved Using Antibody-Based Methods and Alanine Substitution Mutagenesis." J. Interferon Cytokine Res. 21 (2001): 931-941. PubMed: 11747625.

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