

**Monoclonal Anti-Human Interferon Beta Protein, Clone A5 (produced *in vitro*)**

**Catalog No. NR-15259**

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

**Contributor:**

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**Manufacturer:**

BEI Resources

**Product Description:**

Antibody Class: IgAk

Mouse monoclonal antibody prepared against a recombinant form of the human interferon beta (IFN-β) protein was purified from clone A5 hybridoma supernatant using a protein-free thiophilic adsorbent. 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.<sup>1</sup> The clone A5 antibody is specific for human IFN-β and does not cross-react with IFN-α or IFN-γ.

**Material Provided:**

Each vial of NR-15259 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-15259 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-15259 recognizes recombinant human IFN-β in western blot assays. The clone A5 monoclonal antibody is also reported to function in ELISA and RIA, and to neutralize the anti-viral and anti-proliferative effects of IFN-β.<sup>1</sup> The epitope recognized by the clone A5 antibody has been mapped to the interferon α/β receptor subunit 2 (INFAR-2) binding site of IFN-β.<sup>2</sup>

**Citation:**

Acknowledgment for publications should read "The following reagent was obtained through BEI Resources, NIAID, NIH: Monoclonal Anti-Human Interferon Beta Protein, Clone A5 (produced *in vitro*), NR-15259."

**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/bmb15/index.htm](http://www.cdc.gov/biosafety/publications/bmb15/index.htm).

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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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