

**SM098A****Monoclonal Antibody to IFNG / Interferon gamma - Azide Free**

<b>Alternate names:</b>	IFN-gamma, gamma IFN
<b>Quantity:</b>	1 mg
<b>Concentration:</b>	2.0 mg/ml
<b>Background:</b>	Interferon gamma is mainly produced by T lymphocytes and NK cells. It is a pleiotropic cytokine involved in the regulation of nearly all phases of immune and inflammatory responses, including the activation, growth and differentiation of T cell, B cells, macrophages, NK cells and other cell types such as endothelial cells and fibroblasts. It has weak antiviral and antiproliferative activity, and potentiates the antiviral and anti tumor effects of IFN alpha / beta (type I interferon). It is upregulated by IL2, FGF basic, EGF and downregulated by vitamin D3 or DMN. Labile at pH 2.
<b>Uniprot ID:</b>	<a href="#">P01580</a>
<b>NCBI:</b>	<a href="#">NP_032363.1</a>
<b>GeneID:</b>	<a href="#">15978</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM20A (for use in rat samples)
<b>Clone:</b>	DB1
<b>Immunogen:</b>	Recombinant rat IFN gamma.
<b>Format:</b>	<b>State:</b> Lyophilized purified IgG <b>Purification:</b> Affinity chromatography on Protein A <b>Buffer System:</b> PBS containing 125mM Trehalose <b>Reconstitution:</b> Restore with 0.5ml distilled water
<b>Applications:</b>	Immunohistochemistry on frozen sections. ELISA. Western Blot. Functional Assays. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody reacts with IFN-gamma. Clone DB-1 exhibits high affinity binding to the natural and recombinant forms and effectively neutralises the anti viral activity of IFN-gamma. It also blocks the induction of Ia antigen expression on murine keratinocytes. There is no cross-reaction with rodent IFN-alpha or IFN-beta or with human interferons. <b>Species:</b> Rat, Mouse. Other species not tested.

**Storage:**

Prior to reconstitution store at 2-8°C.  
Following reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

1. Paineau J, Priestley C, Fabre J, Chevalier S, van der Meide P, Schellekens H, et al. Effect of recombinant interferon gamma and interleukin-2 and of a monoclonal antibody against interferon gamma on the rat immune response against heart allografts. *J Heart Lung Transplant*. 1991 May-Jun;10(3):424-30. PubMed PMID: 1906747.
2. Paineau J, Priestley C, Fabre J, Chevalier S, van der Meide P, Jacques Y, et al. Effects of gamma interferon and interleukin-2, and of gamma-interferon antibodies, on the rat immune response against allografts. *Transplant Proc*. 1989 Feb;21(1 Pt 1):999-1001. PubMed PMID: 2495638.
3. van der Meide PH, Dubbeld M, Vijverberg K, Kos T, Schellekens H. The purification and characterization of rat gamma interferon by use of two monoclonal antibodies. *J Gen Virol*. 1986 Jun;67 ( Pt 6):1059-71. PubMed PMID: 2423637.
4. Keller R, Keist R, Van der Meide PH, Groscurth P, Aguet M, Leist TP. Induction, maintenance, and reinduction of tumoricidal activity in bone marrow-derived mononuclear phagocytes by *Corynebacterium parvum*. Evidence for the involvement of a T cell- and interferon-gamma-independent pathway of macrophage activation. *J Immunol*. 1987 Apr 1;138(7):2366-71. PubMed PMID: 3104463.
5. Jacob CO, Holoshitz J, Van der Meide P, Strober S, McDevitt HO. Heterogeneous effects of IFN-gamma in adjuvant arthritis. *J Immunol*. 1989 Mar 1;142(5):1500-5. PubMed PMID: 2493048.
6. Kingston AE, Bergsteinsdottir K, Jessen KR, Van der Meide PH, Colston MJ, Mirsky R. Schwann cells co-cultured with stimulated T cells and antigen express major histocompatibility complex (MHC) class II determinants without interferon-gamma pretreatment: synergistic effects of interferon-gamma and tumor necrosis factor on MHC class II induction. *Eur J Immunol*. 1989 Jan;19(1):177-83. PubMed PMID: 2493382.