

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse IFN-γ in ELISAs. In ELISAs, this antibody does not cross-react with recombinant mouse (rm) C10, rmG-CSF, rmGM-CSF, recombinant human IFN-γ, rmlL-1α, rmlL-1β, rmlL-2, rmlL-3, rmlL-4, rmlL-5, rmlL-6, rmlL-7, rmlL-9, rmlL-10, rmlL-10 R, rmlL-12, rmlL-13, rmJE, rmKC, rmlLIF, rmM-CSF, rmMIP-1α, rmMIP-1β, rmMIP-2, rmSCF, rmTNF-α, rmTpo, and rmVEGF.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> and IgG <sub>2B</sub> Cocktail Clone # 37801/37875
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse IFN-γ
<b>Formulation</b>	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

<b>Mouse IFN-γ Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	2-8 μg/mL	Mouse IFN-γ Antibody (Catalog # <a href="#">MAB785</a> )
<b>ELISA Detection</b>	0.4-0.8 μg/mL	Mouse IFN-γ Biotinylated Antibody (Catalog # <a href="#">BAF485</a> )
<b>Standard</b>		Recombinant Mouse IFN-γ (Catalog # <a href="#">485-MI</a> )

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Interferon-gamma (IFN-γ, IFNG), also known as type II or Immune Interferon, exerts a wide range of immunoregulatory activities and is considered to be the prototype proinflammatory cytokine. Mature human IFN-γ exists as a non-covalently linked homodimer of 20-25 kDa molecular weight variably glycosylated subunits. It shares 86% amino acid (aa) sequence identity with rat IFN-γ, 38-44% with bovine, canine, cotton rat, equine, feline, human, porcine and rhesus IFN-γ. IFN-γ dimers bind to IFN-γ RI (α subunits) which then interact with IFN-γ RII (β subunits) to form the functional receptor complex of two α and two β subunits. Inclusion of IFN-γ RII increases the binding affinity for ligand and the efficiency of signal transduction. IFN-γ is produced by a variety of immune cells under inflammatory conditions, notably by T cells and NK cells. It plays a key function in host defense by promoting the development and activation of Th1 cells, chemoattraction and activation of monocytes and macrophages, up-regulation of antigen presentation molecules, and immunoglobulin class switching in B cells. It also exhibits antiviral, antiproliferative, and apoptotic effects. In addition, IFN-γ functions as an anti-inflammatory mediator by promoting the development of regulatory T cells and inhibiting Th17 cell differentiation. The pleiotropic effects of IFN-γ contribute to the development of multiple aspects of atherosclerosis.