Anti-Interferon-γ produced in goat, affinity isolated antiserum

Catalog Number I9141

Synonym: Anti-IFN-γ

Product Description
Anti-Interferon-γ was produced in goat using recombinant, mouse IFN-γ, expressed in E. coli, as the immunogen. Affinity isolated antibody is obtained from goat anti-interferon-γ antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to mouse interferon-γ.

Interferon-γ exerts a variety of biological effects including antiviral activity,1 inhibition of cell or tumor growth2,3 and promotion of differentiation of B cells into immunoglobulin-producing cells.4,5 In addition to antiviral activity, human IFN-γ is a potent modulator of immune response and modifies cellular processes.6 IFN-γ is classified as immune interferon.6 IFN-γ functions as an activating factor to prime macrophages (MAF) for non-specific tumoricidal activity7 and activates monocytes to exert enhanced cytotoxicity against tumor cells.8 IFN-γ acts a signal for major histocompatibility antigen expression.9 IFN-γ boosts cytototoxicity of natural killer cells and stimulates T cell cytotoxicity. The species specificity of IFN-γ resides in the interaction of IFN-γ with its receptor.10 Human IFN-γ does not bind specifically to mouse, hamster or bovine cells.10

Reagent
Supplied as a lyophilized powder from 0.2 μm-filtered phosphate buffered saline (pH 7.4) with 5% trehalose.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage
Prior to reconstitution, store at −20 °C. Reconstituted product may be stored 2-8 °C for a maximum of one month. For prolonged storage, freeze in working aliquots at −20 °C. Avoid repeated freezing and thawing.

Reconstitution and Use
To one vial of lyophilized powder, add 1 ml of 0.2 μm-filtered PBS to produce a 100 μg/ml stock solution of Anti-IFN-γ. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Product Profile
Neutralization: Anti-IFN-γ is tested for its ability to neutralize the biological activity of rmIFN-γ on L929 cells. The ND50 of the antibody is defined as the concentration of antibody resulting in a one-half maximal inhibition of bioactivity of rmIFN-γ that is present at a concentration just high enough to elicit a maximum response. In this bioassay, rmIFN-γ was mixed with various dilutions of the antibody and the antigen-antibody mixture was added to confluent cultures of L929 cells in a 96-well plate. The assay mixture was incubated at 37 °C for 20-24 hours in a humidified CO2 incubator. After incubation, the medium was aspirated from all wells and encephalomyocarditis virus (EMCV) was added to each test well. The 96-well plate was incubated for an additional 20-24 hours. The cells were fixed and examined for cytopathic effect by measurement of optical densities in a microplate reader at 540 nm.

Indirect Immunoblotting: 0.1-0.2 μg/ml antibody detects 2 ng/lane of recombinant, mouse IFN-γ under reducing and non-reducing conditions.

The antibody may also be used in ELISA. By ELISA and immunoblotting, the antibody shows <1% cross-reactivity with recombinant human IFN-γ. In addition, by direct ELISA, the antibody does not cross-react with other cytokines tested.*
References

* rhANG, rhAnnexin V, rhAR, rhB7-1, rhB7-2, rmB7-2, rhBTC, rhβ-NGF, rhBDNF, rmC10, rhCD4, rhCD8, rhCD28, rhCNTF, rrCNTF, rhEGF, rhENA-78, rhEPO, rhFGFa, rhFGFb, rhFGF-4, rhFGF-5, rhFGF-6, rhFGF-7, rhFGF-9, rhG-CSF, rhG-CSF Rα, rmG-CSF, rhGDNF, rhGM-CSF, rhGRO, rhGROα, rhGROβ, rhHB-EGF, rhHRG-α, rhHGF, rh309, rhiGF-I, rhiGF-I R, rhiGF-II, rhiIL-1α, rhiIL-1 R, rhiIL-1 RII, rmiIL-1α, rhiIL-1β, rriIL-1β, rhiIL-1 ra, rmiIL-1 ra, rhiIL-2, rhiIL-2 sRα, rhiIL-2 sRβ, rhiIL-2 sRγ, rmiIL-2, rhiIL-3, rhiIL-3 sRα, rmiIL-3, rhiIL-4, rhiIL-4 sR, rmiIL-4, rhiIL-5, rhiIL-5 sRα, rhiIL-5 sRβ, rmiIL-5, rhiIL-6, rhiIL-6 sR, rmiIL-6, rhiIL-7, rhiIL-7 R, rmiIL-7, rhiIL-8, rhiIL-9, rmiIL-9, rhiIL-10, rmiIL-10, rhiIL-10 sR, rmiIL-10 sR, rhiIL-11, rhiIL-12, rmiIL-12, rhiIL-13, rmiIL-13, rhiIL-15, rhiP-10, rhiJAK-1, rmJAK-1, rmiJAK-2, rmJE, rmiJE, rhLIF, rhLIF R, rmLIF, rhM-CSF, rhM-CSF R, rhMCP-1, rhMCP-1 R, rhMCP-2, rhMCP-3, rhMidkine, rhMIF, rhiMIP-1α, rmiMIP-1α, rmiMIP-1β, rmiMIP-1β, rhMIP-2, rhNT-3, rhNT-4, rhOSM, rhPD-ECGF, hPDGF, pPDGF, pPDGF-AB, rhPDGF-AB, rhPDGF-β, rhPDGF Rα, rhPIGF, rhPTN, rhRANTES, rhSCF, rmSCF, rhsgp130, rhSLPI, rhSTAT-1, rmSTAT-3, rmSTAT-4, hTfR, rhTGF-α, rhTGF-β1, rhTGF-β2, rhTGF-β3, rTGF-β5, rLAP (TGF-β1), rLatent TGF-β1, rTGF-β5 sRII, rTGF-β5 sRII, rTNF-α, rmiTNF-α, rrTNF-α, rhTNF-β, rhTNF-β, rhsTNF RI, rhsTNF RII, rhTPO, rmTPO, rhVEGF, rmVEGF.