

Human IFN-γ R1/CD119 Antibody

Monoclonal Mouse IgG₁ Clone # GIR208 Catalog Number: MAB6732

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human IFN-γ R1/CD119 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant mouse IFN-γ R1, recombinant human (rh) IFN-γ R2, or rhIL-10 Rβ is observed.
Source	Monoclonal Mouse IgG ₁ Clone # GIR208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human placenta-derived IFN-γ R1/CD119
Endotoxin Level	<0.10 EU per 1 μg of the antibody by the LAL method.
Formulation	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.

Neutralization

Measured by its ability to neutralize IFN- γ R1/CD119-mediated inhibition of EMCV-induced cytopathy in the HeLa human cervical epithelial carcinoma cell line. The Neutralization Dose (ND₅₀) is typically 0.03-0.15 μ g/mL in the presence of 2 ng/mL Recombinant Human IFN- γ .

IFN-y Inhibition of EMCVinduced Cytopathy and Neutralization by Human IFNγ R1/CD119 Antibody. Recombinant Human IFN-γ (Catalog # 285-IF) reduces the Encephalomyocarditis Virus (EMCV)-induced cytopathy in the HeLa human cervical epithelial carcinoma cell line in a dosedependent manner (orange line). Inhibition of EMCV activity elicited by Recombinant Human IFN-y (2 ng/mL) is neutralized (green line) by increasing concentrations of Mouse Anti-Human IFNγ R1/CD119 Monoclonal Antibody (Catalog # MAB6732). The ND₅₀ is typically 0.03-0.15 µg/mL.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping 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

- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 6 months, -20 to -70 °C under sterile conditions after reconstitution

BACKGROUND

The high-affinity IFN-γ receptor complex is made up of two type I membrane proteins, IFN-γ R1 (IFN-γ Rα) and IFN-γ R2 (IFN-γ Rβ). Both proteins are members of the type II cytokine receptor family and share approximately 52% amino acid sequence identity. IFN-γ R1 is the ligand-binding subunit that is necessary and sufficient for IFN-γ binding and receptor internalization. IFN-γ R2 is required for IFN-γ signaling but does not bind IFN-γ by itself. Human IFN-γ R1 cDNA encodes a 499 amino acid (aa) protein with a 17 aa signal peptide, a 228 aa extracellular domain, a 23 aa transmembrane domain, and a 221 aa intracellular domain. Human and mouse IFN-γ R1 share 52% aa identity and bind IFN-γ in a species-specific manner. IFN-γ R1 is constitutively expressed in most cell types. Soluble IFN-γ R1 that binds IFN-γ has been detected in biological fluids.

References:

1. Bach, E.A. et al. (1997) Annu. Rev. Immunol. 15:563.

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