

DESCRIPTION

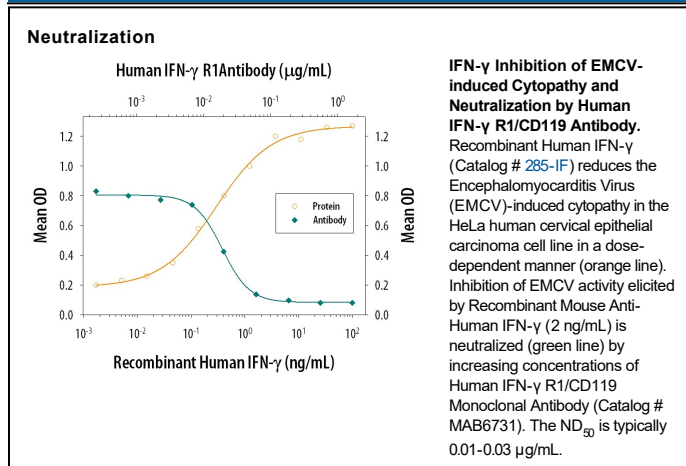
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|---------------------------|--|
| Species Reactivity | Human |
| Specificity | Detects human IFN- γ R1 in direct ELISAs and Western blots. In direct ELISAs, this antibody does not cross-react with recombinant mouse IFN- γ R1, recombinant human (rh) IFN- γ R2, or rhIL-10 R β . |
| Source | Monoclonal Mouse IgG ₁ Clone # 92101 |
| Purification | Protein A or G purified from ascites |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant human IFN- γ R1 Glu18-Gly245 Accession # P15260.1 |
| Endotoxin Level | <0.10 EU per 1 μ g of the antibody by the LAL method. |
| Formulation | Lyophilized from a 0.2 μ m 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 μ m 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.

| | Recommended Concentration | Sample |
|-----------------------|---|---|
| Western Blot | 1 μ g/mL | Recombinant Human IFN- γ R1/CD119 (Catalog # 673-1R) |
| Flow Cytometry | 2.5 μ g/10 ⁶ cells | Human whole blood monocytes |
| CyTOF-ready | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. | |
| 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. Meager, A. (1987) in <i>Lymphokines and Interferons, a Practical Approach</i> . Clemens, M.J. <i>et al.</i> (eds): IRL Press. 129. The Neutralization Dose (ND ₅₀) is typically 0.01-0.03 μ g/mL in the presence of 2 ng/mL Recombinant Human IFN- γ . | |

DATA



PREPARATION AND STORAGE

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|--------------------------------|--|
| 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 |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 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 R α) and IFN- γ R2 (IFN- γ R β). 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) residue 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% amino acid sequence 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.