

#### DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human IFN- $\gamma$ R1 in direct ELISAs and Western blots. In direct ELISAs, this antibody does not cross-react with recombinant mouse IFN- $\gamma$ R1, recombinant human (rh) IFN- $\gamma$ R2, or rhIL-10 R $\beta$ .
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 92101
<b>Purification</b>	Protein A or G purified from ascites
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human IFN- $\gamma$ R1 Glu18-Gly245 Accession # P15260.1
<b>Conjugate</b>	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

#### 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>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 $\mu$ g/10 <sup>6</sup> cells	Human whole blood monocytes

#### PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### BACKGROUND

The high-affinity IFN- $\gamma$  receptor complex is made up of two type I membrane proteins, IFN- $\gamma$  R1 (IFN- $\gamma$  R $\alpha$ ) and IFN- $\gamma$  R2 (IFN- $\gamma$  R $\beta$ ). Both proteins are members of the type II cytokine receptor family and share approximately 52% amino acid sequence identity. IFN- $\gamma$  R1 is the ligand-binding subunit that is necessary and sufficient for IFN- $\gamma$  binding and receptor internalization. IFN- $\gamma$  R2 is required for IFN- $\gamma$  signaling but does not bind IFN- $\gamma$  by itself. Human IFN- $\gamma$  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- $\gamma$  R1 share 52% amino acid sequence identity and bind IFN- $\gamma$  in a species-specific manner. IFN- $\gamma$  R1 is constitutively expressed in most cell types. Soluble IFN- $\gamma$  R1 that binds IFN- $\gamma$  has been detected in biological fluids.

#### References:

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

#### PRODUCT SPECIFIC NOTICES

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