

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IFN- γ R1/CD119 in ELISAs.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IFN- γ R1/CD119 Ala26-Asp253 Accession # Q91Y85
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.

Mouse IFN-γ R1 Sandwich Immunoassay		Reagent
ELISA Capture	2-8 μ g/mL	Mouse IFN- γ R1/CD119 Antibody (Catalog # MAB10262)
ELISA Detection	0.1-0.4 μ g/mL	Mouse IFN- γ R1/CD119 Biotinylated Antibody (Catalog # BAF1026)
Standard		Recombinant Mouse IFN- γ R1/CD119 Fc Chimera (Catalog # 1026-GR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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% overall 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 similarity 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. The recombinant soluble IFN- γ R1 produced at R&D Systems has been shown to bind IFN- γ with high affinity and is a potent IFN- γ antagonist.

References:

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