



Rat Anti-Mouse IFN γ Monoclonal antibody, clone R4-6A2 (CABT-L4328)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The R4-6A2 monoclonal antibody reacts with mouse IFN γ (interferon gamma) a 20 kDa soluble pleiotropic cytokine and the sole member of the type II class of interferons. IFN γ is primarily produced by activated lymphocytes including T, B, NK cells, and ILCs. IFN γ exerts immunoregulatory, anti-proliferative, anti-viral, and proinflammatory activities and plays an important role in activation, growth, and differentiation of T and B lymphocytes, macrophages, NK cells and other non-hematopoietic cell types. Additionally, IFN γ induces the production of cytokines, Fc receptor, and adhesion molecules and up-regulates MHC class I and II antigen expression by antigen presenting cells during an immune response. IFN γ has also been shown to modulate macrophage effector functions, influence isotype switching and induce the secretion of immunoglobulins by B cells. IFN γ signals through the IFN gamma receptor which exists as a heterodimer composed of CD119 (IFN γ receptor 1) and AF-1 (IFN γ receptor 2). The IFN γ receptor is expressed ubiquitously on almost all cell types with the exception of mature erythrocytes. The R4-6A2 antibody has been shown to neutralize both natural and recombinant IFN γ .

Target	Mouse IFN γ
Immunogen	Partially-purified native mouse IFN γ
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	R4-6A2
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE

Conjugate	Functional Grade
Applications	in vivo IFN γ neutralization, in vitro IFN γ neutralization
Molecular Weight	150 kDa
Format	0.2 μ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 8.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/ μ g). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB01
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction This gene encodes a member of the type II interferon family. The protein encoded is a soluble cytokine with antiviral, immunoregulatory and anti-tumor properties and is a potent activator of macrophages. Mutations in this gene are associated with aplastic anemia.

Keywords IFNG;interferon, gamma;IFG;IFI;interferon gamma;IFN-gamma;immune interferon

GENE INFORMATION

Official Symbol	interferon, gamma
Synonyms	IFNG; interferon, gamma; IFG; IFI; interferon gamma; IFN-gamma; immune interferon
References	Clemente-Casares, X., et al. (2016). "Expanding antigen-specific regulatory networks to treat autoimmunity." Nature 530(7591): 434-440. PubMed;Coley, S. M., et al. (2009). "IFN-gamma dictates allograft fate via opposing effects on the graft and on recipient CD8 T cell responses." J Immunol 182(1): 225-233. PubMed;