



## Rat Anti-Mouse IFN $\gamma$ 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 $\gamma$  (interferon gamma) a 20 kDa soluble pleiotropic cytokine and the sole member of the type II class of interferons. IFN $\gamma$  is primarily produced by activated lymphocytes including T, B, NK cells, and ILCs. IFN $\gamma$  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 $\gamma$  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 $\gamma$  has also been shown to modulate macrophage effector functions, influence isotype switching and induce the secretion of immunoglobulins by B cells. IFN $\gamma$  signals through the IFN gamma receptor which exists as a heterodimer composed of CD119 (IFN $\gamma$  receptor 1) and AF-1 (IFN $\gamma$  receptor 2). The IFN $\gamma$  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 $\gamma$ .

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

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

## BACKGROUND

<b>Introduction</b>	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.
<b>Keywords</b>	IFNG;interferon, gamma;IFG;IFI;interferon gamma;IFN-gamma;immune interferon

## GENE INFORMATION

<b>Official Symbol</b>	interferon, gamma
<b>Synonyms</b>	IFNG; interferon, gamma; IFG; IFI; interferon gamma; IFN-gamma; immune interferon
<b>References</b>	Clemente-Casares, X., et al. (2016). "Expanding antigen-specific regulatory networks to treat autoimmunity." <i>Nature</i> 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." <i>J Immunol</i> 182(1): 225-233. PubMed;