



Rat Anti-Mouse IFN γ Monoclonal antibody, clone XMG1.2 (CABT-L4338)

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

PRODUCT INFORMATION

Product Overview

The XMG1.2 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 gamma receptor 1) and AF-1 (IFN gamma receptor 2). The IFN γ receptor is expressed ubiquitously on almost all cell types with the exception of mature erythrocytes. The XMG1.2 antibody is a neutralizing antibody.

Target	Mouse IFN γ
Immunogen	Recombinant mouse IFN γ
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	XMG1.2
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade

Applications	in vivo IFNy neutralization, in vitro IFNy neutralization, ELISPOT, FC, WB
Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS + 0.01% Tween, pH 8.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <1EU/mg (<0.001EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB01T, 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	Glasner, A., et al. (2018). "NKp46 Receptor-Mediated Interferon-gamma Production by Natural Killer Cells Increases Fibronectin 1 to Alter Tumor Architecture and Control Metastasis." <i>Immunity</i> 48(1): 107-119 e104. PubMed;Deng, L., et al. (2014). "Irradiation and anti-PD-L1 treatment synergistically promote antitumor immunity in mice." <i>J Clin Invest</i> 124(2): 687-695. PubMed;Rabenstein, H., et al. (2014). "Differential kinetics of antigen dependency of CD4+ and CD8+ T cells." <i>J Immunol</i> 192(8): 3507-3517. PubMed;Uddin, M. N., et al. (2014). "TNF-alpha-dependent hematopoiesis following Bcl11b deletion in T cells restricts metastatic melanoma." <i>J Immunol</i> 192(4): 1946-1953. PubMed;Kugler, D. G., et al. (2013). "CD4+ T cells are trigger and

target of the glucocorticoid response that prevents lethal immunopathology in toxoplasma infection." J Exp Med 210(10): 1919-1927. PubMed
