

# Datasheet for ABIN1690732

# anti-Interferon gamma antibody





#### Overview

Quantity:	100 μg
Target:	Interferon gamma (IFNG)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Interferon gamma antibody is un-conjugated
Application:	ELISA, Immunoprecipitation (IP), Radioimmunoassay (RIA)

### **Product Details**

Purpose:	Anti-IFN gamma Purified
Immunogen:	Recombinant human interferon gamma
Clone:	NIB42
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody NIB42 recognizes IFN-gamma, a 16-25 kDa cytokine produced by activated Th1 cells and NK cells. Binds both glycosylated and non-glycosylated protein.
Cross-Reactivity (Details):	Human
Purification:	Purified by protein-A affinity chromatography.
Purity:	> 95 % (by SDS-PAGE)

## **Target Details**

Target:	Interferon gamma (IFNG)
Alternative Name:	IFN gamma (IFNG Products)
Background:	Interferon gamma,The interferon gamma (IFN-gamma, 16-25 kDa) is an important regulator of
	the immune response, produced in activated Th1 cells and NK cells, particularly in response to
	IL-2, TNF-alpha and IL-12, its production is suppressed by IL-4, IL-10, and TGF-beta. The
	producing of IFN-gamma is activated by specific antigens or mitogens through the T cell
	antigen receptor. IFN-gamma polypeptide forms: 40-60 kDa forms are observable under non-
	denaturing conditions as dimers and trimers, 20 kDa and 25 kDa forms exist due to variable
	glycosylation. IFN-gamma belongs to the type II interferons, also called immune IFN. IFN-
	gamma shows antiviral activity and has important immunoregulatory functions. It is a potent
	activator of macrophages and had antiproliferative effects on transformed cells. IFN-gamma
	plays an important role in regulating B cell differentiation by simultaneously stimulating class
	switch recombination to the IgG3 and IgG2a isotypes while represing class switch
	recombination to the IgE and IgG1 isotypes. It also appears to promote antigen presentation by
	B cells through its effects on MHC. Binding of IFN-gamma to its receptor increases the
	expression of class I MHC on all somatic cells. It also enhances the expression of class II MHC
	on antigen-presenting cells. IFN-gamma is the major means by which T cells activate
	macrophages, increasing their ability to kill bacteria, parasites, and tumours. The activation of
	macrophages by IFN-gamma is essential for the elimination of bacteria that replicate within the
	phagosomes of macrophages (f.e. Mycobacteria and Listeria monocytogenes). IFN-gamma
	can potentiate the high antiviral and antitumor effects of the type I interferons (IFN-alpha, IFN-
	beta). IFN-gamma may also activate neutrophils and NK cells.,Interferon gamma, IFN-gamma
Gene ID:	3458
UniProt:	P01579
Pathways:	Interferon-gamma Pathway, Cellular Response to Molecule of Bacterial Origin, Regulation of
·	Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of
	Molecular Mediator of Immune Response, ER-Nucleus Signaling, Regulation of Carbohydrate
	Metabolic Process, Protein targeting to Nucleus, Autophagy
Application Details	
Application Notes:	ELISA: Capture antibody in combination with detection antibody 4S.B3.
Restrictions:	For Research Use only

#### Handling

Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do not freeze.
Handling Advice: Storage:	Do not freeze. 4 °C

Product cited in:

Kofler, Chmielewski, Rappl, Hombach, Riet, Schmidt, Hombach, Wendtner, Abken: "CD28 costimulation Impairs the efficacy of a redirected t-cell antitumor attack in the presence of regulatory t cells which can be overcome by preventing Lck activation." in: **Molecular therapy:** the journal of the American Society of Gene Therapy, Vol. 19, Issue 4, pp. 760-7, (2011) (PubMed).

Veltkamp, Van Moorsel, Rijkers, Ruven, Van Den Bosch, Grutters: "Toll-like receptor (TLR)-9 genetics and function in sarcoidosis." in: **Clinical and experimental immunology**, Vol. 162, Issue 1, pp. 68-74, (2010) (PubMed).

DOmbrain, Robinson, Stanisic, Taraika, Bernard, Michon, Mueller, Schofield: "Association of early interferon-gamma production with immunity to clinical malaria: a longitudinal study among Papua New Guinean children." in: **Clinical infectious diseases: an official publication of the Infectious Diseases Society of America**, Vol. 47, Issue 11, pp. 1380-7, (2008) (PubMed).

Joseph, Jones, Kimani, Mwatha, Kamau, Kazibwe, Kemijumbi, Kabatereine, Booth, Kariuki, Ouma, Vennervald, Dunne: "Cytokine production in whole blood cultures from a fishing community in an area of high endemicity for Schistosoma mansoni in Uganda: the differential effect of parasite worm and egg antigens." in: **Infection and immunity**, Vol. 72, Issue 2, pp. 728-34, (2004) (PubMed).

Black, Weir, Chaguluka, Warndorff, Crampin, Mwaungulu, Sichali, Floyd, Bliss, Jarman, Donovan, Andersen, Britton, Hewinson, Huygen, Paulsen, Singh, Prestidge, Fine, Dockrell: "Gamma

interferon responses induced by a panel of recombinant and purified mycobacterial antigens in healthy, non-mycobacterium bovis BCG-vaccinated Malawian young adults." in: **Clinical and diagnostic laboratory immunology**, Vol. 10, Issue 4, pp. 602-11, (2003) (PubMed).

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