

Rat IFN-alpha Monoclonal Antibody | anti-IFN-alpha antibody

IFN-alpha, Mouse, mAb F18

CATALOG #	HOST	REACTIVITY
AAA77791	Rat	Cross reactant: Human IFN Reactivity: NoCross reactant: Mouse IFN-Beta Reactivity: NoCross reactant: Mouse IFN-gamma Reactivity: No

PRODUCT SYNONYMS

IFN-alpha; Monoclonal Antibody; Mouse; mAb F18; anti-IFN-alpha antibody

PRODUCT SPECIFICATIONS

Host	Rat
Reactivity	Cross reactant: Human IFN Reactivity: No Cross reactant: Mouse IFN-Beta Reactivity: No Cross reactant: Mouse IFN-gamma Reactivity: No
Clonality	Monoclonal
Isotype	Rat IgG1
Form/Format	1 ml (100 ug/ml) 0.2 um filtered protein G purified antibody solution in PBS, containing 0.1% bovine serum albumin. The endotoxin concentration is < 24 EU/mg, determined with MBS584532 LAL Assay For unit size 0.5 mg or larger: PBS only
Positive Control	Plasmacytoid dendritic cells
Preparation and Storage	Product should be stored at 4 degree C. Under recommended storage conditions, product is stable for one year.

IMAGES

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

FC: For intracellular staining of IFN- α , cells can be fixed in 1 % formaldehyde; blocked and permeabilized in 0.2 % saponin, 5 % normal rabbit serum for 30 minutes on ice. (Ref.2)

FS: Neutralization of IFN- α by adding 1 μ g antibody F18 per mouse i.v. before treatment with 35 μ g LPS i.p., decreased the LPS-induced IL-1 β serum response. (Ref.3).

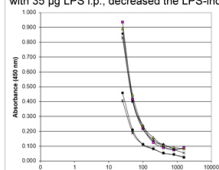


Figure 1: pictures of an immuno assay experiment.

	F	FC ^{2,4}	FS ³	IA ¹	IF	IP	P	W
Yes		•	•	•				•
No								
N.D.	•				•	•	•	

N.D. = Not Determined; F = Frozen sections; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IF = Immuno Fluorescence; IP = Immuno Precipitation; P = Paraffin sections; W = Western blot
Application IA has been tested by Hycol Biotech. Application IP is based on personal communication.

Application Data

Application Data

IA: AAA77791 has been used as a capture antibody to determine

ADDITIONAL INFORMATION

Related Product Information for anti-IFN-alpha antibody	The monoclonal antibody F18 recognizes and neutralizes both natural and recombinant mouse alpha Interferon (IFN-alpha). IFN-alpha is a cytokine that belongs to the type I interferons (IFN-I). IFN-alpha is secreted by many cell types including lymphocytes (NK cells, B-cells and T-cells), macrophages, fibroblasts, endothelial cells, osteoblasts, microglia and others. Interferons stimulate both macrophages and NK cells to elicit an anti-viral response, and are also active against tumors. Although all cells can produce IFN-I, plasmacytoid dendritic cells (pDCs) produce 1,000-fold higher levels than other cell types, and are responsible for systemic IFN-I responses to many viruses. They are coined as the natural IFN-producing cells. However, under deprived pDC condition, other dendritic cells are capable of producing high levels of IFN-I. Interferons were initially characterized for their ability to 'interfere' with viral replication, slow cell proliferation, and profoundly alter immunity. IFN-alpha has several regulatory roles and diverse biological activities, including control of cellular and humoral immune responses, inflammation, and tumor regression. In addition, IFN-alpha participates in the regulation of various cellular and humoral processes such as the endocrine system modulates behavior, brain activity, temperature, glucose sensitive neurons, feeding pattern and opiate activity. With the availability of monoclonal antibodies directed against IFN-alpha, it is possible to interpret results obtained from crude materials containing both IFN-alpha and IFNbeta. The difficulties in studying in vitro and in vivo effects of 'type 1'. Interferons arise from the fact that both alpha and beta Interferons are produced in response to the same stimuli and also seem to act via the same receptor. These Interferon activities can only be distinguished from one another by use of specific neutralizing antibodies.
References	1. Dalod, M et al; Interferon α and interleukin 12 responses to viral infections: pathways regulating dendritic cell cytokine expression in vivo. J Exp Med 2002, 195: 517 2. Diebold, S et al; Viral infection switches nonplasmacytoid dendritic cells into high interferon producers. Nature 2003, 424: 324 3. Joshi, V et al; A role for Stat1 in the regulation of lipopolysaccharide-induced Interleukin-1beta expression. J Interferon Cytokine Res 2006, 26: 739.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13128950
NCBI GeneID	3439
NCBI Accession #	NP_076918.1
NCBI GenBank Nucleotide #	NM_024013.2
UniProt Accession #	P01562 ; Q14605 ; Q2M1L8 ; Q52LB8 ; Q5VYQ2 ; Q7M4Q1 ; Q8WZ68 ; Q9UMJ3 ; D4Q9M8
Molecular Weight	21,725 Da
NCBI Official Full Name	interferon alpha-1/13
NCBI Official Synonym Full Names	interferon alpha 1
NCBI Official Symbol	IFNA1
NCBI Official Synonym Symbols	IFL; IFN; IFNA@; IFNA13; IFN-ALPHA; IFN-alphaD
NCBI Protein Information	interferon alpha-1/13
UniProt Protein Name	Interferon alpha-1/13
UniProt Gene Name	IFNA1
UniProt Synonym Gene Names	IFN-alpha-1/13; LeIF D

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.