

30-1335: Anti-IFN-gamma Monoclonal Antibody (Clone:G-23)

Clonality :	Monoclonal
Clone Name :	G-23
Application :	FACS
Reactivity :	Human
Gene :	IFNG
Gene ID :	3458
Uniprot ID :	P01579
Format :	Purified
Alternative Name :	Interferon gamma, Immune interferon
Isotype :	Mouse IgG1
Immunogen Information :	Recombinant human IFN-gamma (aa 22-166 representing mature IFN-gamma)

Description

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 repressing 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.

Product Info

Amount :	0.1 mg
Purification :	Purified by protein-A affinity chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry Recommended dilution: 2-4 µg/ml

Positive control: PMA/ionomycin stimulated Peripheral Blood Lymphocytes (PBL)

Application note: Intracellular staining

Western Blotting Recommended dilution: 1 µg/ml

Positive control: recombinant human IFN-gamma

ELISA