

## 30-1914: Biotin Conjugated Anti-IFN-gamma Monoclonal Antibody (Clone:4S.B3)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	4S.B3
<b>Application :</b>	ICC,ELISA,ICC/IF,IHC,FACS,WB
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	Biotin
<b>Gene :</b>	IFNG
<b>Gene ID :</b>	3459
<b>Uniprot ID :</b>	P01579
<b>Format :</b>	Purified
<b>Alternative Name :</b>	Interferon gamma, Immune interferon
<b>Isotype :</b>	Mouse IgG1 kappa
<b>Immunogen Information :</b>	Interferon gamma derived from human leukocytes

### Description

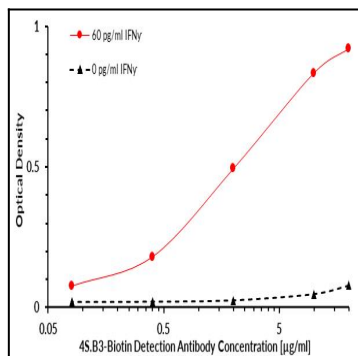
The Interferon gamma (IFN-gamma; 16-25 kDa) is an important regulator of the immune response, produced in activated Th1 cells and NK cells, particularly in response to IL-2, TNF-alpha and IL-12; its production is suppressed by IL-4, IL-10, and TGF-beta. The producing of IFN-gamma is activated by specific 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

<b>Amount :</b>	0.1 mg
<b>Content :</b>	Antibody suspended in phosphate buffered saline (PBS) solution containing 0.2% BSA and 15 mM sodium azide
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

### Application Note

Flow cytometry: Intracellular staining; recommended dilution 1-4 µg/ml.



Cytokine IFN gamma (IFN $\gamma$ ) sandwich ELISA (enzyme-linked immunosorbent assay) that utilizes antibody clone NIB42 (Cat. No. 30-1507) as the protein capture antibody and antibody clone 4S.B3-Biotin as the detection antibody. Recombinant IFN $\gamma$  was captured by NIB42 and detected by variable amounts of 4S.B3-Biotin. The 4S.B3-Biotin conjugate was visualized by Streptavidin-HRP and substrate solution (TMB). The intensity of the signal is proportional to the amount of cytokine and to the amount of the detection antibody.