Human IFN-γ F(ab')2 Antibody

Recombinant Monoclonal Mouse IgG_{2B} Clone # 25723R-FAB2

Catalog Number: MAB285R-FAB2

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IFN-γ in direct ELISAs.
Source	Recombinant Monoclonal Mouse IgG_{2B} Clone # 25723R-FAB2
Purification	Protein A or G purified from cell culture supernatant
Immunogen	*E. coli*-derived recombinant human IFN-γ Gln24-Gln166 Accession # AAP20098.1
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

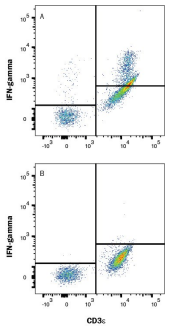
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25 µg/mL	Human peripheral blood mononuclear cells (PBMCs) treated with 50 ng/mL PMA, 1 ug/mL Ionomycin, and 3 uM Monensin overnight

DATA

Intracellular Staining by Flow Cytometry



Detection of IFN- gamma in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) treated with (A) 50 ng/mL PMA, 1 ug/mL Ionomycin, and 3 uM Monensin overnight or (B) untreated, were stained with Mouse Anti-Human IFN- gamma Monoclonal Antibody (Catalog # MAB285R-FAB2) followed by anti-Mouse IgG PE-conjugated secondary antibody (Catalog # F0102B) and Mouse Anti-Human CD3 epsilon APC-conjugated Monoclonal Antibody (Catalog # FAB100A). Quadrant markers were set based on Mouse IgG2A Isotype Control (Catalog # MAB003). To facilitate intracellular staining, cells were fixed and permeabilized with FlowX FoxP3 Fixation & Permeabilization Buffer Kit (Catalog # FC012). Staining was performed using our Staining Intracellular Molecules protocol.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human IFN-γ F(ab')2 Antibody

Recombinant Monoclonal Mouse IgG_{2B} Clone # 25723R-FAB2

Catalog Number: MAB285R-FAB2

BACKGROUND

Interferon-gamma (IFN-gamma, IFNG), also known as type II or Immune Interferon, exerts a wide range of immunoregulatory activities and is considered to be the prototype proinflammatory cytokine. Mature human IFN-gamma exists as a non-covalently linked homodimer of 20-25 kDa molecular weight variably glycosylated subunits. Glycosylation of IFN-gamma at sites Asn25 and Asn97 is critical for protease resistance. It shares 90% amino acid (aa) sequence identity with rhesus IFN-gamma, 59-64% with bovine, canine, equine, feline, and porcine IFN- gamma, and 37-43% with cotton rat, mouse, and rat IFN-gamma. IFN-gamma dimers bind to IFN-gamma RI (alpha subunits) which then interact with IFN-gamma RII (beta subunits) to form the functional receptor complex of two alpha and two beta subunits. Inclusion of IFN-gamma RII increases the binding affinity for ligand and the efficiency of signal transduction. IFN-gamma is produced by a variety of immune cells under inflammatory conditions, notably by T cells and NK cells. It plays a key function in host defense by promoting the development and activation of Th1 cells, chemoattraction and activation of monocytes and macrophages, up-regulation of antigen presentation molecules, and immunoglobulin class switching in B cells. It also exhibits antiviral, antiproliferative, and apoptotic effects. In addition, IFN-gamma functions as an anti-inflammatory mediator by promoting the development of regulatory T cells and inhibiting Th17 cell differentiation. The pleiotropic effects of IFN-gamma contribute to the development of multiple aspects of atherosclerosis.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449