

APC anti-human IFN- γ Antibody

Catalog# / Size	502511 / 25 tests 502512 / 100 tests
Clone	4S.B3
Regulatory Status	RUO
Other Names	Interferon- γ , Immune interferon, Type II interferon, T cell interferon, Macrophage-activating factor (MAF), IFN-g, IFN-gamma
Isotype	Mouse IgG1, κ
Description	Interferon- γ is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN- γ also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN- γ can upregulate MHC class I and II antigen expression by antigen-presenting cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	Chimpanzee, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Partially purified, native human IFN- γ
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Red Laser (633 nm)
Application Notes	<p>ELISA or ELISPOT Detection⁵: The biotinylated 4S.B3 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified NIB42 antibody (Cat. No. 502402/502404) or purified MD-1 antibody (Cat. No. 507502/507513) as the capture antibody.</p> <p>Flow Cytometry^{3,4,6-8}: The fluorochrome-labeled 4S.B3 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN-γ-producing cells within mixed cell populations.</p> <p>Additional reported applications (for the relevant formats) include: neutralization^{1,2}, Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated tissue sections, and immunocytochemistry. The 4S.B3 antibody can neutralize the bioactivity of natural or recombinant IFN-γ.</p> <p>Note: For testing human IFN-γ in serum or plasma, BioLegend's ELISA Max™ Sets (Cat. No. 430101 to 430106) are specially developed and recommended.</p>

Application References

(PubMed link indicates BioLegend citation)

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Product Citations

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RRID

AB_315236 (BioLegend Cat. No. 502511)
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Antigen Details

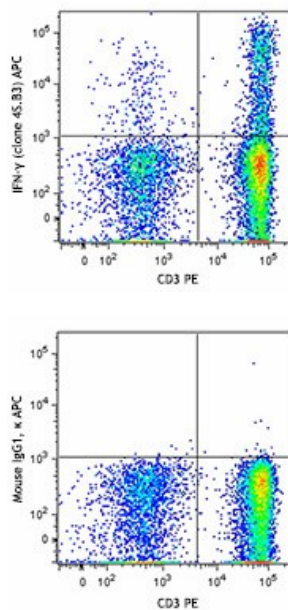
Structure	Cytokine; dimer; 20-25 kD (Mammalian)
Bioactivity	Antiviral/antiparasitic activities; inhibits proliferation; enhances MHC class I and II expression on APC
Cell Sources	CD8 ⁺ and CD4 ⁺ T cells, NK cells
Cell Targets	T cells, B cells, macrophages, NK cells, endothelial cells, fibroblasts
Receptors	IFN- γ R α (CDw119) dimerized with IFN- γ R β (AF-1)
Cell Type	Tregs
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Fitzgerald K, <i>et al.</i> Eds. 2001. <i>The Cytokine FactsBook.</i> Academic Press, San Diego. 2. De Maeyer E, <i>et al.</i> 1992. <i>Curr. Opin. Immunol.</i> 4:321. 3. Farrar M, <i>et al.</i> 1993. <i>Annu. Rev. Immunol.</i> 11:571. 4. Gray P, <i>et al.</i> 1987. <i>Lymphokines</i> 13:151.

Regulation

Upregulated by IL-2, FGF-basic, EGF; downregulated by vitamin D3 or DMN; labile at pH2

Gene ID[3458](#)**Related Protocols**[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)[Intracellular Flow Cytometry Staining Protocol](#)**Other Formats**

PE anti-human IFN- γ , APC anti-human IFN- γ , FITC anti-human IFN- γ , Biotin anti-human IFN- γ , Purified anti-human IFN- γ , Alexa Fluor® 488 anti-human IFN- γ , Alexa Fluor® 647 anti-human IFN- γ , Alexa Fluor® 700 anti-human IFN- γ , Pacific Blue™ anti-human IFN- γ , PerCP/Cyanine5.5 anti-human IFN- γ , APC/Cyanine7 anti-human IFN- γ , PE/Cyanine7 anti-human IFN- γ , Brilliant Violet 421™ anti-human IFN- γ , Brilliant Violet 570™ anti-human IFN- γ , Brilliant Violet 605™ anti-human IFN- γ , Brilliant Violet 650™ anti-human IFN- γ , Brilliant Violet 711™ anti-human IFN- γ , Brilliant Violet 785™ anti-human IFN- γ , Brilliant Violet 510™ anti-human IFN- γ , PE/Dazzle™ 594 anti-human IFN- γ , APC/Fire™ 750 anti-human IFN- γ , PerCP anti-human IFN- γ , Brilliant Violet 750™ anti-human IFN- γ , KIRAVIA Blue 520™ anti-human IFN- γ Antibody, Spark NIR™ 685 anti-human IFN- γ Antibody

Product Data

PMA+ionomycin stimulated (6 hours) human peripheral blood lymphocytes (in the presence of monensin) were stained with CD3 PE, then fixed with Fixation Buffer (Cat# 420801), and permeabilized with Permeabilization Wash Buffer (Cat# 421002). Cells were then stained with IFN- γ (clone 4S.B3) APC (top) or mouse IgG1, κ APC isotype control (bottom).

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