

APC/Cyanine7 anti-human IFN- γ Antibody

Catalog# / Size	502529 / 25 tests 502530 / 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/Cyanine7 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
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>
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.

Application References

(PubMed link indicates
BioLegend citation)

1. Meager A, *et al.* 1984. *J. Interferon Res.* 4:619. (Neut)
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3. Sester M, *et al.* 2002. *J. Virol.* 76:3748. (ICFC)
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Product Citations

1. Zeng W, *et al.* 2017. *Front Immunol.* 0.806944444. [PubMed](#)
2. Tauriainen J, *et al.* 2017. *Sci Rep.* 7:40354. [PubMed](#)
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6. Lim D, *et al.* 2014. *J Immunol.* 193:5065. [PubMed](#)
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11. Longbrake EE, *et al.* 2018. *Mult Scler.* 24:728. [PubMed](#)
12. Wang Y, *et al.* 2021. *Cell Reports.* 36(6):109516. [PubMed](#)
13. Perveen K, *et al.* 2021. *Int J Mol Sci.* 0.916666666666667. [PubMed](#)
14. Cassotta A, *et al.* 2020. *Eur J Immunol.* . [PubMed](#)

RRID

AB_10663411 (BioLegend Cat. No. 502529)
AB_10663412 (BioLegend Cat. No. 502530)

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-γRα (CDw119) dimerized with IFN-γRβ (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](#)

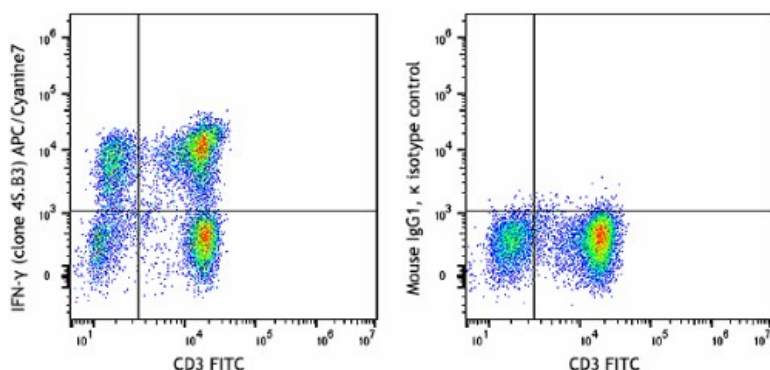
[Intracellular Flow Cytometry Staining Protocol](#)

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 (6 hours) stimulated human PBMCs were surface stained with CD3 FITC then fixed, permeabilized, and intracellularly stained with IFN- γ (clone 4S.B3) APC/Cyanine7 (left), or Mouse IgG1, κ APC/Cyanine7 isotype (right). Cells shown gated on lymphocyte population.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587