

PE/Dazzle™ 594 anti-human IFN-γ Antibody

Catalog# / Size	506529 / 25 tests 506530 / 100 tests
Clone	B27
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. The B27 antibody reacts with the human interferon-γ. The B27 antibody can neutralize the bioactivity of natural or recombinant IFN-γ.

Product Details

Verified Reactivity	Human
Reported Reactivity	Chimpanzee, Baboon, Cynomolgus, Rhesus, African Green, Pigtailed Macaque, Sooty Mangabey
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	<i>E. coli</i> -expressed recombinant 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 PE/Dazzle™ 594 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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Flow Cytometry²: The fluorochrome-labeled B27 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN-γ-producing cells within mixed cell populations. For intracellular cytokine staining protocol, please visit www.biolegend.com and click on the support section. Neutralization^{1,3,6,7}: The Ultra-LEAF™ Purified antibody (Endotoxin <0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for neutralization of human IFN-γ bioactivity (Cat. No. 506531).
Application References	1. Favre C, <i>et al.</i> 1989. <i>Molec. Immunol.</i> 26:17. (Neut) 2. Kaur A, <i>et al.</i> 2002. <i>J Virol.</i> 76:3646. 3. Abrams J, <i>et al.</i> 1992. <i>Immunol. Rev.</i> 127:5. (Neut) 4. Andersson U, <i>et al.</i> 1999. <i>Detection and quantification of gene expression</i> . New York:Springer-Verlag.
(PubMed link indicates BioLegend citation)	

5. Rout N, *et al.* 2010. *PLoS One* 5:e9787. (FC)
6. Acosta-Rodriguez EV, *et al.* 2007. *Nat. Immunol.* 9:942-9. (Neut)
7. Gangur V, *et al.* 1998. *FASEB J.* 12:705-13. (Neut)

Product Citations

1. Hoang TN, *et al.* 2021. *Cell.* 184:460. [PubMed](#)
2. Hoang TN, *et al.* 2020. *bioRxiv.* . [PubMed](#)
3. Zhu S, *et al.* 2022. *J Oncol.* 2022:8724933. [PubMed](#)
4. Johnson JK, *et al.* 2022. *Methods Mol Biol.* 2470:641. [PubMed](#)

RRID

AB_2566717 (BioLegend Cat. No. 506529)
AB_2566718 (BioLegend Cat. No. 506530)

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

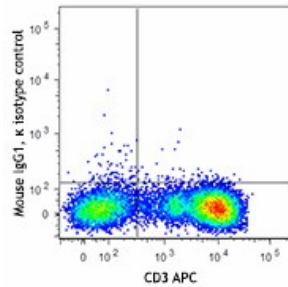
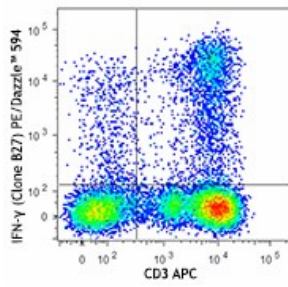
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human IFN-γ, FITC anti-human IFN-γ, PE anti-human IFN-γ, Purified anti-human IFN-γ, Alexa Fluor® 700 anti-human IFN-γ, PE/Cyanine7 anti-human IFN-γ, Purified anti-human IFN-γ (Maxpar® Ready), APC/Cyanine7 anti-human IFN-γ, Pacific Blue™ anti-human IFN-γ, PerCP/Cyanine5.5 anti-human IFN-γ, PE/Dazzle™ 594 anti-human IFN-γ, Ultra-LEAF™ Purified anti-human IFN-γ, Brilliant Violet 605™ anti-human IFN-γ, Brilliant Violet 510™ anti-human IFN-γ, Brilliant Violet 421™ anti-human IFN-γ

Product Data



PMA+ionomycin-stimulated (in the presence of monensin, 6hrs) human peripheral blood lymphocytes were stained with CD3 APC, fixed, permeabilized, and then intracellularly stained with IFN- γ (clone B27) PE/Dazzle™ 594 (top) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (bottom).

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