

Brilliant Violet 421™ anti-human IFN-γ Antibody

Catalog# / Size	506537 / 25 tests 506538 / 100 tests
Clone	B27 (See other available formats)
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

Reactivity	Human, Cross-Reactivity: Chimpanzee, Baboon, Cynomolgus, Rhesus, Pigtailed Macaque, African Green, 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 Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
Concentration	Lot-specific (please contact technical support for concentration and total μg amount, or use our Lookup tool if you have a lot number.)
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	<p>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.</p> <p>Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	<p>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.</p> <p>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).</p>
Application References	<ol style="list-style-type: none"> Favre C, et al. 1989. Molec. Immunol. 26:17. (Neut) Kaur A, et al. 2002. J Virol. 76:3646. Abrams J, et al. 1992. Immunol. Rev. 127:5. (Neut) Andersson U, et al. 1999. Detection and quantification of gene expression. New York:Springer-Verlag. Rout N, et al. 2010. PLoS One 5:e9787. (FC)
(PubMed link indicates BioLegend citation)	

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)

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, et al. Eds. 2001. The Cytokine FactsBook. Academic Press San Diego. 2. De Maeyer E, et al. 1992. Curr. Opin. Immunol. 4:321. 3. Farrar M, et al. 1993. Annu. Rev. Immunol. 11:571. 4. Gray P, et al. 1987. Lymphokines 13:151.
Regulation	Upregulated by IL-2, FGF-basic, EGF; downregulated by vitamin D3 or DMN; labile at pH2
Gene ID	3458

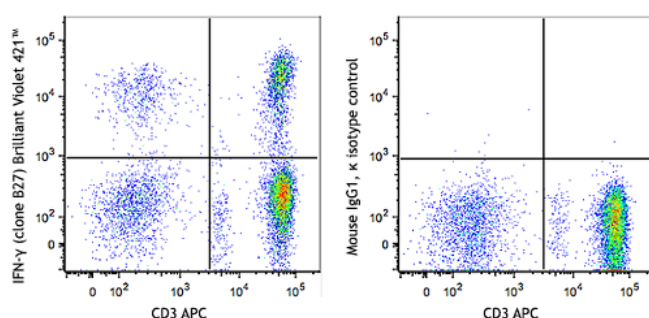
Related Protocols

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human IFN- γ , FITC anti-human IFN- γ , LEAF™ Purified anti-human IFN- γ , PE anti-human IFN- γ , Purified anti-human IFN- γ , Alexa Fluor® 700 anti-human IFN- γ , PE/Cy7 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

Product Data



PMA+Ionomycin-stimulated (4 hours) human peripheral blood lymphocytes were fixed and permeabilized then intracellularly stained with CD3 APC (clone UCHT1) and either IFN- γ (clone B27) Brilliant Violet 421™ (left) or mouse IgG1, κ Brilliant Violet 421™ isotype control (right).

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