

Alexa Fluor® 488 anti-human IFN-γ Recombinant Antibody

Catalog# / Size	309057 / 25 tests 309058 / 100 tests
Clone	QA21A01
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
Antibody Type	Recombinant
Host Species	Mouse
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 Alexa Fluor® 488 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
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 flow cytometry using our Cyto-Fast™ Fix/Perm Buffer Set. For flow cytometric staining, the suggested use of this reagent is 5 µL per 106 cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

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Excitation Laser	Blue Laser (488 nm)
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Application Notes	Flow Cytometry: Clone QA21A01 does not block the staining of clones 4S.B3, B27, or W19227A, but partially blocks the staining of clone W19227C.
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ELISA and ELISPOT Capture: The QA21A01 recombinant antibody is useful as the capture antibody in a sandwich ELISA assay, when used in conjunction with the biotinylated 4S.B3 antibody (Cat. No. 502504) as the detecting antibody and recombinant human IFN-γ (Cat. No. 570209) as the standard. For ELISPOT capture applications, a concentration range of 0.5 – 2.0 µg/mL is recommended.

Antigen Details

Structure	Cytokine; dimer; 20-25 kD (Mammalian)
Distribution	CD8+ and CD4+ T cells, NK cells
Function	Antiviral/antiparasitic activities; inhibits proliferation; enhances MHC class I and II expression on APC. Upregulated by IL-2, FGF-basic, EGF; downregulated by vitamin D3 or DMN; labile at pH2.
Interaction	T cells, B cells, macrophages, NK cells, endothelial cells, fibroblasts
Ligand/Receptor	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

1. Fitzgerald K, *et al.* 2001. *The Cytokine FactsBook*. Academic Press San Diego.
2. De Maeyer E, *et al.* 1992. *Curr Opin Immunol*. 4:321-6.
3. Farrar M, *et al.* 1993. *Annu Rev Immunol*. 11:11:571-611.
4. Gray P, *et al.* 1987. *Lymphokines*. 13:151.

Gene ID [3458](#)

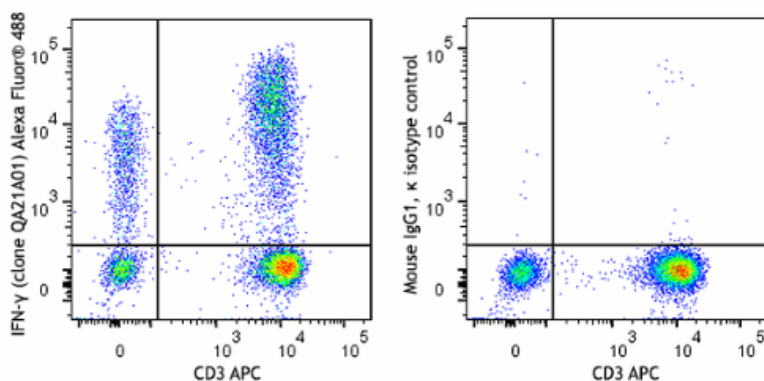
Related Protocols

- [Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

APC/Cyanine7 anti-human IFN- γ Recombinant Antibody, PE anti-human IFN- γ Recombinant Antibody, APC anti-human IFN- γ Recombinant Antibody, Ultra-LEAF™ Purified anti-human IFN- γ Recombinant Antibody, Alexa Fluor® 488 anti-human IFN- γ Recombinant Antibody

Product Data



Human peripheral blood cells were stimulated with Cell Activation Cocktail (with Brefeldin A) (Cat. No. 423303) for 6 hours and surface stained with anti-human CD3 (clone UCHT1) APC. Cells were then fixed and permeabilized with Cyto-Fast™ Fix/Perm Buffer Set (Cat. No. 426803) and intracellularly stained with anti-human IFN- γ recombinant (clone QA21A01) Alexa Fluor® 488 (left) or mouse IgG1, κ Alexa Fluor® 488 isotype control (right). Data shown is gated on the lymphocyte population.

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