

Biotin anti-mouse IFN- γ Antibody

Catalog# / Size	505803 / 50 μ g 505804 / 500 μ g
Clone	XMG1.2
Regulatory Status	RUO
Other Names	Interferon- γ , Immune interferon, Type II interferon, T cell interferon, Macrophage-activating factor (MAF)
Isotype	Rat IgG1, κ
Description	IFN- 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	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	<i>E. coli</i> -expressed, recombinant mouse IFN- γ
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. Do not freeze.
Application	ELISA Detection , ELISPOT Detection , ICFC
Recommended Usage	Each lot of this antibody is quality control tested by ELISA assay . For use as an ELISA detection antibody, a concentration range of 0.5-2.0 μ g/ml is recommended. To obtain a linear standard curve, serial dilutions of IFN- γ recombinant protein ranging from 2000 to 15 pg/ml are recommended for each ELISA plate. For use as an ELISPOT detection antibody, a concentration range of 1-4 μ g/ml is recommended. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	ELISA^{1-4,11,14} or ELISPOT⁵ Detection: The biotinylated XMG1.2 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified R4-6A2 antibody (Cat. No. 505702/505706) as the capture antibody and recombinant mouse IFN- γ (Cat. No. 575309) as the standard. ELISA or ELISPOT Capture: The purified XMG1.2 antibody is useful as a capture antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with biotinylated R4-6A2 antibody (Cat. No. 505704) as the detection antibody and recombinant mouse IFN- γ (Cat. No. 575309) as the standard. The LEAF™ purified antibody is suggested for ELISPOT capture (Cat. No. 505812). Flow Cytometry^{7,8,12,13,16}: The fluorochrome-labeled XMG1.2 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN- γ -producing cells within mixed cell populations. Neutralization^{1-3,9,10}: The XMG1.2 antibody can neutralize the bioactivity of natural or recombinant IFN- γ . The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for neutralization of mouse IFN- γ bioactivity <i>in vivo</i> and <i>in vitro</i> (Cat. No. 505812). For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 505834) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/ μ g). Additional reported applications (for the relevant formats) include: Western blotting, immunohistochemical staining of frozen tissue sections ^{6,22,23} , and immunocytochemistry. Note: For testing mouse IFN- γ in serum, plasma or supernatant, BioLegend's ELISA Max™ Sets (Cat. No. 430801 to 430806) are specially developed and recommended.

Application References

(PubMed link indicates BioLegend citation)

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Product Citations

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RRID

AB_315397 (BioLegend Cat. No. 505803)
AB_315398 (BioLegend Cat. No. 505804)

Antigen Details

Structure	Cytokine; dimer; 40-80 kD (Mammalian)
Bioactivity	Antiviral/antiparasitic activities; inhibits proliferation; enhances MHC class I and II expression on APCs
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 1- α -25-Dihydroxy vitamin D3, dexamethasone
Gene ID	15978

Related Protocols

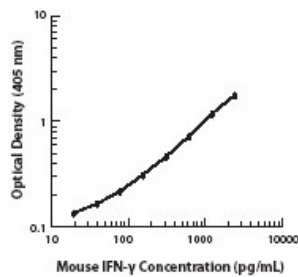
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Other Formats

APC anti-mouse IFN- γ , Biotin anti-mouse IFN- γ , FITC anti-mouse IFN- γ , PE anti-mouse IFN- γ , Purified anti-mouse IFN- γ , Alexa Fluor® 488 anti-mouse IFN- γ , Alexa Fluor® 647 anti-mouse IFN- γ , Pacific Blue™ anti-mouse IFN- γ , PerCP/Cyanine5.5 anti-mouse IFN- γ , PE/Cyanine7 anti-mouse IFN- γ , Brilliant Violet 421™ anti-mouse IFN- γ , Brilliant Violet 650™ anti-mouse IFN- γ , Ultra-LEAF™ Purified anti-mouse IFN- γ , Brilliant Violet 711™ anti-mouse IFN- γ , Brilliant Violet 785™ anti-mouse IFN- γ , Brilliant Violet 605™ anti-mouse IFN- γ , Brilliant Violet 510™ anti-mouse IFN- γ , Purified anti-mouse IFN- γ (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse IFN- γ , Alexa Fluor® 700 anti-mouse IFN- γ , APC/Cyanine7 anti-mouse IFN- γ , GolnVivo™ Purified anti-mouse IFN- γ , APC/Fire™ 750 anti-mouse IFN- γ , Spark NIR™ 685 anti-mouse IFN- γ

Product Data



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