

PerCP/Cyanine5.5 anti-mouse IFN- γ Antibody

Catalog# / Size	505821 / 25 μ g 505822 / 100 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 and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Concentration	0.2 mg/ml
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 or 5 μ l per 100 μ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes	<p>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.</p> <p>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).</p> <p>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.</p> <p>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/μg, Azide-Free, 0.2 μm 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/μg).</p> <p>Additional reported applications (for the relevant formats) include: Western blotting, immunohistochemical staining of frozen tissue sections^{6,22,23}, and immunocytochemistry.</p> <p>Note: For testing mouse IFN-γ in serum, plasma or supernatant, BioLegend's ELISA Max™ Sets</p>

(Cat. No. 430801 to 430806) are specially developed and recommended.

Additional Product Notes

BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact [Technical Service](#) if you have any questions.

Application References

(PubMed link indicates BioLegend citation)

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Product Citations

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RRID

AB_961361 (BioLegend Cat. No. 505821)
AB_961359 (BioLegend Cat. No. 505822)

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. The Cytokine FactsBook. 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

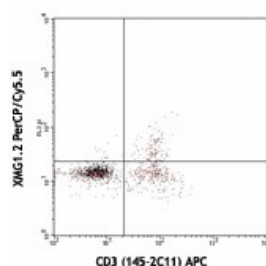
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

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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



PMA/Ionomycin-stimulated (6hrs)
C57BL/6 splenocytes surface stained
with 145-2C11 (CD3) APC and
intracellularly stained with XMG1.2
PerCP/Cyanine5.5

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