

Product Data Sheet

PE anti-mouse IFN- γ

Catalog # / Size: 505807 / 25 μ g
505808 / 100 μ g

Clone: XMG1.2

Isotype: Rat IgG1, κ

Immunogen: *E. coli* -expressed, recombinant mouse IFN- γ

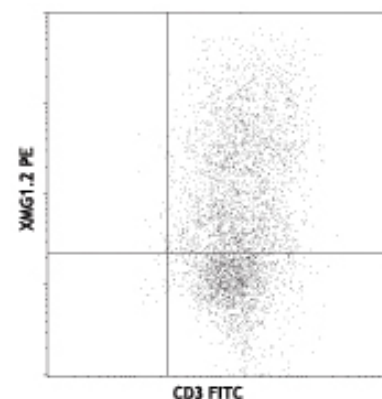
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.2 mg/ml

Storage: The IFN- γ antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. **Do not freeze.**



PMA/Ionomycin-stimulated BALB/c T-cells were stained with CD3 FITC and XMG1.2 PE

Applications:

Applications: ICFC - *Quality tested*

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.25 μ g per million cells in 100 μ l volume. 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 *in vivo* and *in vitro* (Cat. No. 505812). For *in vivo* 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 paraformaldehyde-fixed, saponin-treated frozen tissue sections⁶, 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:**
- Abrams J, et al. 1992. *Immunol. Rev.* 127:5. (ELISA, Neut)
 - Sander B, et al. 1993. *J. Immunol. Meth.* 166:201. (ELISA, Neut)
 - Abrams J, et al. 1995. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.20. (ELISA, Neut)
 - Yang X, et al. 1993. *J. Immunoassay* 14:129. (ELISA)
 - Klinman D, et al. 1994. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.19. (ELISPOT)
 - Sander B, et al. 1991. *Immunol. Rev.* 119:65. (IHC)
 - Ferrick D, et al. 1995. *Nature* 373:255. (FC)
 - Ko SY, et al. 2005. *J. Immunol.* 175:3309. (FC) PubMed
 - Peterson KE, et al. 2000. *J. Virol.* 74:5363. (Neut)
 - DeKrey GK, et al. 1998. *Infect. Immun.* 66:827. (Neut)
 - Dzhagalov I, et al. 2007. *J. Immunol.* 178:2113. (ELISA)
 - Lawson BR, et al. 2007. *J. Immunol.* 178:5366. (FC)
 - Lee JW, et al. 2006. *Nature Immunol.* 8:181. (FC) PubMed
 - Xu G, et al. 2007. *J. Immunol.* 179:5358. (ELISA) PubMed
 - Montfort M, et al. 2004. *J. Immunol.* 173:4084. PubMed
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 - Jordan JM, et al. 2008. *Infect Immun.* 76:3717. PubMed
 - Tonkin DR, et al. 2008. *J. Immunol.* 181:4516. PubMed
 - Charles N, et al. 2010. *Nat. Med.* 16:701. (FC) PubMed
 - Cui Y, et al. 2009. *Invest. Ophth. Vis. Sci.* 50:5811. (FC) PubMed
 - Ma Y, et al. 2013. *J. Immunol.* 191:5588. PubMed



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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.

Antigen References: 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.

Related Products:	Product	Clone	Application
	Cell Staining Buffer		FC, ICC, ICFC
	Fixation Buffer		ICC, ICFC
	Permeabilization Wash Buffer (10X)		ICC, ICFC, IHC
	Brefeldin A Solution (1,000X)		ICFC
	Monensin Solution (1,000X)		ICFC
	PE Rat IgG1, κ Isotype Ctrl	RTK2071	FC, ICFC



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