BioLegend
The path to legendary discovery™

# Product Data Sheet

# Purified anti-mouse IFN-γ

**Catalog # / Size:** 505801 / 50 µg
505802 / 500 µg

**Clone:** XMG1.2

**Isotype:** Rat IgG1, κ

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

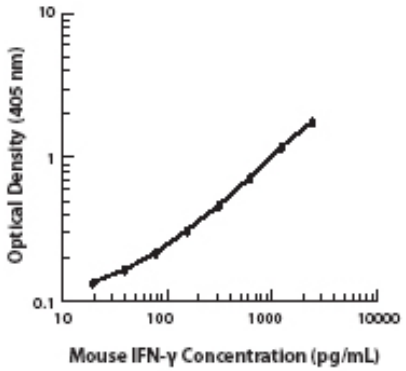
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography.

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

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.




# Applications:

**Applications:** ELISA Capture - *Quality tested*
IHC, WB - *Reported in the literature*
CyTOF® - *Validated*

**Recommended Usage:** Each lot of this antibody is quality control tested by ELISA assay. For ELISA capture applications, a concentration range of 0.5-2.0 µg/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. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** **ELISA[1-4,11,14] or ELISPOT[5] 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/µg, Azide-Free, 0.2 µm 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/µg).
**Additional reported applications (for the relevant formats) include:** Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections[6], 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:**

1. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5. (ELISA, Neut)
2. Sander B, *et al.* 1993. *J. Immunol. Meth.* 166:201. (ELISA, Neut)
3. Abrams J, *et al.* 1995. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.20. (ELISA, Neut)
4. Yang X, *et al.* 1993. *J. Immunoassay* 14:129. (ELISA)
5. Klinman D, *et al.* 1994. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.19. (ELISPOT)
6. Sander B, *et al.* 1991. *Immunol. Rev.* 119:65. (IHC)
7. Ferrick D, *et al.* 1995. *Nature* 373:255. (FC)
8. Ko SY, *et al.* 2005. *J. Immunol.* 175:3309. (FC) PubMed
9. Peterson KE, *et al.* 2000. *J. Virol.* 74:5363. (Neut)
10. DeKrey GK, *et al.* 1998. *Infect. Immun.* 66:827. (Neut)
11. Dzhagalov I, *et al.* 2007. *J. Immunol.* 178:2113. (ELISA)
12. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366. (FC)
13. Lee JW, *et al.* 2006. *Nature Immunol.* 8:181. (FC) PubMed
14. Xu G, *et al.* 2007. *J. Immunol.* 179:5358. (ELISA) PubMed
15. Montfort M, *et al.*2004. *J. Immunol.* 173:4084. PubMed
16. Haring JS, *et al.* 2008. *J. Immunol.* 180:2855. (FC) PubMed
17. Jordan JM, *et al.* 2008. *Infect Immun.* 76:3717. PubMed
18. Tonkin DR, *et al.* 2008. *J. Immunol.* 181:4516. PubMed
19. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) PubMed
20. Cui Y, *et al.* 2009. *Invest. Ophth. Vis. Sci.* 50:5811. (FC) 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 |
|---|---|---|
| Biotin anti-mouse IFN-γ | R4-6A2 | ELISA Detection, ELISPOT Detection |
| Recombinant Mouse IFN-γ | rm IFN-γ | BA, ELISA |
| HRP Avidin | Avidin | ELISA, ELISPOT, IHC, WB |
| TMB Substrate Reagent Set | | ELISA |
| ELISA Assay Diluent (5X) | | ELISA |
| Mouse IFN-γ ELISA MAX™ Standard | | ELISA |
| Mouse IFN-γ ELISA MAX™ Deluxe | | ELISA |




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