

## PE/Cy7 anti-mouse IFN- $\gamma$

**Catalog # / Size:** 505825 / 25  $\mu$ g  
505826 / 100  $\mu$ g

**Clone:** XMG1.2

**Isotype:** Rat IgG1,  $\kappa$

**Immunogen:** *E. coli*-expressed, recombinant mouse IFN- $\gamma$

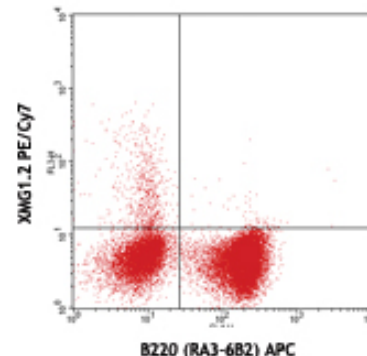
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

**Concentration:** 0.2 mg/ml

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



PMA/Ionomycin-stimulated (6hrs)  
C57BL/6 mouse splenocytes stained  
with B220 (RA3-6B2) APC and  
XMG1.2 PE/Cy7

## 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  $\leq 1.0$   $\mu$ g per million cells in 100  $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** **ELISA<sup>1-4,11,14</sup> or ELISPOT<sup>5</sup> 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- $\gamma$  (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- $\gamma$  (Cat. No. 575309) as the standard. The LEAF™ purified antibody is suggested for ELISPOT capture (Cat. No. 505812). **Flow Cytometry<sup>7,8,12,13,16</sup>:** The fluorochrome-labeled XMG1.2 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify IFN- $\gamma$ -producing cells within mixed cell populations. **Neutralization<sup>1-3,9,10</sup>:** The XMG1.2 antibody can neutralize the bioactivity of natural or recombinant IFN- $\gamma$ . The LEAF™ purified antibody (Endotoxin  $<0.1$  EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for neutralization of mouse IFN- $\gamma$  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/ $\mu$ g).

**Additional reported applications (for the relevant formats) include:** Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections<sup>6</sup>, and immunocytochemistry.

**Note:** For testing mouse IFN- $\gamma$  in serum, plasma or supernatant, BioLegend's ELISA Max™ Sets (Cat. No. 430801 to 430806) are specially developed and recommended.

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.

### 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
- Haring JS, *et al.* 2008. *J. Immunol.* 180:2855. (FC) PubMed
- Jordan JM, *et al.* 2008. *Infect Immun.* 76:3717. PubMed



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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- $\gamma$  is a potent multifunctional cytokine which is secreted primarily by activated NK cells and T cells. Originally characterized based on anti-viral activities, IFN- $\gamma$  also exerts anti-proliferative, immunoregulatory, and proinflammatory activities. IFN- $\gamma$  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.

<b>Related Products:</b>	<b>Product</b>	<b>Clone</b>	<b>Application</b>
	PE/Cy7 Rat IgG1, $\kappa$ Isotype Ctrl	RTK2071	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC



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