

# Product Data Sheet

## Purified anti-mouse IFN- $\gamma$

**Catalog # / Size:** 505701 / 50  $\mu$ g  
505702 / 500  $\mu$ g

**Clone:** R4-6A2

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

**Immunogen:** Partially-purified, native mouse IFN- $\gamma$

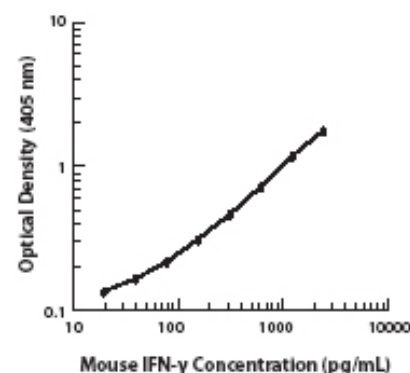
**Reactivity:** Mouse

**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 - *Reported in the literature*

**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  $\mu$ g/ml is recommended. To obtain a linear standard curve, serial dilutions of IFN- $\gamma$  recombinant protein ranging from 2000 to 15  $\mu$ g/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** **ELISA Capture<sup>1-4,6,10,11</sup> or ELISPOT Capture<sup>5</sup>:** The purified R4-6A2 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated XMG1.2 antibody (Cat. No. 505804) as the detecting antibody and recombinant mouse IFN- $\gamma$  (Cat. No. 575309) as the standard. The LEAF™ purified antibody is suggested for ELISPOT capture. The LEAF™ purified antibody is suggested for ELISPOT capture.

**ELISA or ELISPOT Detection:** The biotinylated R4-6A2 antibody is useful as the detecting antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the purified XMG1.2 antibody (Cat. No. 505802/505812) as the capture antibody and recombinant mouse IFN- $\gamma$  (Cat. No. 575309) as the standard.

**Neutralization<sup>1,2,9</sup>:** 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. 505706).

**Additional reported applications (for the relevant formats) include:** immunohistochemical staining<sup>3,6,8</sup> of acetone-fixed frozen tissue sections and paraformaldehyde-fixed, saponin-treated frozen tissue sections.

**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.

- Application References:**
1. Abrams, J., *et al.* 1992. *Immunol. Rev.* 127:5.
  2. Stevenson, M., *et al.* 1990. *Infect. Immun.* 58:3225.
  3. Sander, B., *et al.* 1993. *J. Immunol. Meth.* 166:201.
  4. Yang, X., *et al.* 1993. *J. Immunoassay* 14:129.
  5. Klinman, D., *et al.* 1994. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.19.
  6. Sander, B., *et al.* 1991. *Immunol. Rev.* 119:65.
  7. Finkelman, F., *et al.* 2003. *Curr. Prot. Immunol.* John Wiley & Sons, New York. Unit 6.28.
  8. Khanna, A., *et al.* 2000. *J. Immunol.* 164:1346.
  9. Terrazas, L. I., *et al.* 2005. *Intl. J. Parasitology.* 35:1349.
  10. Dzhalgalov, I., *et al.* 2007. *J. Immunol.* 178:2113.
  11. Xu, G., *et al.* 2007. *J. Immunol.* 179:5358.

**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. The R4-6A2 antibody reacts with mouse interferon-gamma (IFN- $\gamma$ ). The R4-6A2 antibody can neutralize the bioactivity of natural or recombinant IFN- $\gamma$ .

- 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- $\gamma$	XMG1.2	ELISA Detection, ELISPOT
	Recombinant Mouse IFN- $\gamma$	rm IFN- $\gamma$	Detection, ICFC BA, ELISA



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HRP Avidin  
TMB Substrate Reagent Set  
ELISA Assay Diluent (5X)  
Mouse IFN- $\gamma$  ELISA MAX<sup>TM</sup> Standard  
Mouse IFN- $\gamma$  ELISA MAX<sup>TM</sup> Deluxe

Avidin

ELISA, ELISPOT, IHC, WB  
ELISA  
ELISA  
ELISA  
ELISA



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