BioLegend
The path to legendary discovery™

Product Data Sheet

LEAF™ Purified anti-mouse IFN-γ

Catalog # / Size: 505705 / 50 µg
505706 / 500 µg
505707 / 1 mg

Clone: R4-6A2

Isotype: Rat IgG1, κ

Immunogen: Partially-purified, native mouse IFN-γ

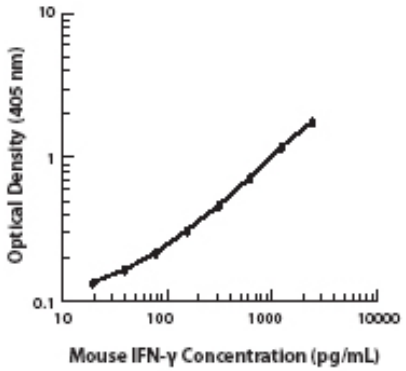
Reactivity: Mouse

Preparation: The LEAF™ (Low Endotoxin, Azide-Free) antibody was purified by affinity chromatography.

Formulation: 0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/µg of the protein (<0.01 ng/µg of the protein) as determined by the LAL test.

Concentration: 1.0 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. This LEAF™ solution contains no preservative; handle under aseptic conditions.



Applications:

Applications: ELISA Capture - *Quality tested*
ELISPOT Capture, Neut, 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 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 Capture[1-4,6,10,11] or ELISPOT Capture[5]:** 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-γ (Cat. No. 575309) as the standard. The LEAF™ purified antibody is suggested for ELISPOT capture. The LEAF™ purified antibody is suggested for ELISPOT capture. For ELISPOT Capture, the suggested use of this antibody is 1 - 4 µg/ml.
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-γ (Cat. No. 575309) as the standard.
Neutralization[1,2,9]: 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. 505706).
Additional reported applications (for the relevant formats) include: immunohistochemical staining[3,6,8] of acetone-fixed frozen tissue sections and paraformaldehyde-fixed, saponin-treated frozen tissue sections.
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.
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. Dzhagalov, I., *et al.* 2007. *J. Immunol.* 178:2113.
11. Xu, G., *et al.* 2007. *J. Immunol.* 179:5358.

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

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.

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4. Gray, P., *et al.* 1987. *Lymphokines* 13:151.

Related Products:

Product	Clone	Application
Biotin anti-mouse IFN-γ	XMG1.2	ELISA Detection, ELISPOT Detection, ICFC
Recombinant Mouse IFN-γ	rm IFN-γ	BA, ELISA
HRP Avidin	Avidin	ELISA, ELISPOT, IHC, WB
LEAF™ Purified Rat IgG1, κ Isotype Ctrl	RTK2071	FC, ICFC, WB, IP, ICC, IF, IHC, FA

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