

Biotin anti-mouse TNF- α

Catalog # / Size: 3131560 / 500 μ g
3131555 / 50 μ g

Clone: MP6-XT22

Isotype: Rat IgG1, κ

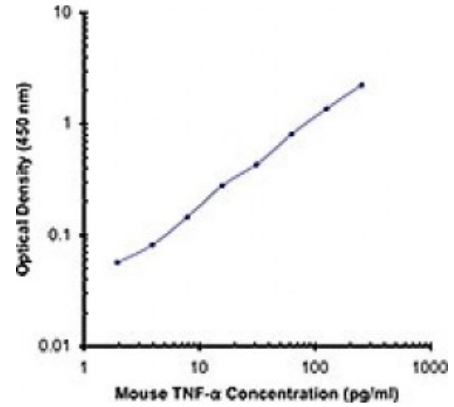
Immunogen: *E. coli*-expressed, recombinant mouse TNF- α

Reactivity: Mouse

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

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

Concentration: 0.5



Applications:

Applications: Other

Recommended Usage: Each lot of this antibody is quality control tested by ELISA assay. For use as an ELISA detection antibody, a concentration range of 0.25-1.0 microg/ml is recommended. To obtain a linear standard curve, serial dilutions of mouse TNF- α recombinant protein ranging from 500 to 4 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 or ELISPOT Detection: The biotinylated MP6-XT22 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified 6B8 antibody (Cat. No. 510802/510804) as the capture antibody.

Flow Cytometry^{6,11,12}: The fluorochrome-labeled MP6-XT22 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify TNF- α -producing cells within mixed cell populations.

Neutralization^{1,5,10,16,17}: The MP6-XT22 antibody can neutralize the bioactivity of natural or recombinant TNF- α . The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for neutralization of mouse TNF- α bioactivity *in vivo* and *in vitro* (Cat. No. 506310). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 506332) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Additional reported applications (for the relevant formats) include: Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections⁷⁻⁹, *in vivo* detection⁵, immunofluorescence, and immunocytochemistry.

Note: For testing mouse TNF- α in serum, plasma or supernatant, BioLegend's ELISA Max™ Sets (Cat. No. 430901 to 430906) are specially developed and recommended.

Application References:

1. Abrams J, *et al.* 1992. *Immunol. Rev.* 127:5. (Neut)
2. Abrams J, *et al.* 1995. *Curr. Prot. Immunol.* John Wiley and Sons, New York. Unit 6.20
3. Mo X, *et al.* 1995. *J. Virol.* 69:1288.
4. Sarawar S, *et al.* 1994. *J. Immunol.* 153:1246.

5. Via C, *et al.* 2001. *J. Immunol.* 167:6821. (Neut)
 6. Infante-Duarte C, *et al.* 2000 *J. Immunol.* 165:6107. (FC)
 7. Jacobs M, *et al.* 2000. *Immunology* 100:494. (IHC)
 8. Marinova-Mutachieva L, *et al.* 1997. *Clin. Exp. Immunol.* 107:507. (IHC)
 9. Williams RO, *et al.* 2000. *J. Immunol.* 165:7240. (IHC)
 10. Scanga CA, *et al.* 1999. *Infect. Immun.* 67:4531. (Neut)
 11. Akilov OE, *et al.* 2007. *J. Leukoc. Biol.* 2007;10.1189/jlb.0706439. (FC)
 12. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366. (FC)
 13. Patole PS, *et al.* 2005. *J. Am. Soc. Nephrol.* 16:3273. [PubMed](#)
 14. Wu S, *et al.* 2005. *Neurosci Lett.* 394:158. [PubMed](#)
 15. Carlson MJ, *et al.* 2009. *Blood* 113:1365. [PubMed](#)
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Description: TNF- α is secreted by macrophages, monocytes, neutrophils, T-cells (principally CD4⁺), and NK-cells. Many transformed cell lines also secrete TNF- α . Monomeric mouse TNF- α is a 156 amino acid protein (N-glycosylated) with a reported molecular weight of 17.5 kD. TNF- α forms multimeric complexes; stable trimers are most common in solution. A 26 kD membrane form of TNF- α has also been described. TNF- α binding to surface receptors elicits a wide array of biologic activities including: cytolysis and cytostasis of many tumor cell lines *in vitro*, hemorrhagic necrosis of tumors *in vivo*, increased fibroblast proliferation, and enhanced chemotaxis and phagocytosis in neutrophils.

Antigen References:

1. Fitzgerald K, *et al.* Eds. 2001. *The Cytokine FactsBook*. Academic Press, San Diego.
2. Beutler B, *et al.* 1988. *Annu. Rev. Biochem.* 57:505.
3. Beutler B, *et al.* 1989. *Annu. Rev. Immunol.* 7:625.