BioLegend
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Product Data Sheet

Purified anti-human TNF-α

Catalog # / Size: 502801 / 50 µg
502802 / 500 µg

Clone: MAb1

Isotype: Mouse IgG1, κ

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

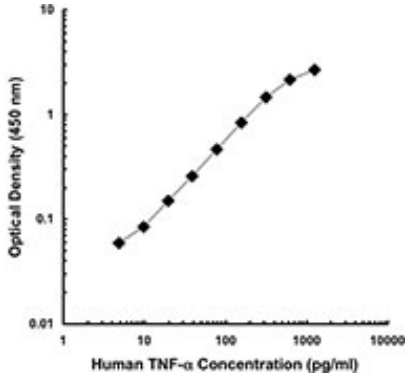
Reactivity: Human

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*
WB - *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 0.25-1 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of 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 Capture:** The purified MAb1 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated MAb11 antibody (Cat. No. 502904/502914) as the detecting antibody. The LEAF™ purified antibody is suggested for ELISPOT capture.

Application References:
1. Rathjen, D., *et al.* 1991. *Mol. Immunol.* 28:79.
2. Danis, V., *et al.* 1991. *Clin. Exp. Immunol.* 85:143.
3. Wyant, T. L., *et al.* 1999. *Infect. Immun.* 67:1338.
4. Nichols, J. E., *et al.* 2001. *J. Virol.* 73:5921.
5. Ivanov,VN.,*et al.* 1999. *J. Biol Chem.* 274:14079. PubMed
6. Varadarajan N, *et al. 2012. PNAS. 109:3885. PubMed.*

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 human TNF-α is a 157 amino acid protein (non-glycosylated) with a reported molecular weight of 17 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*, hemorraghic necrosis of tumors *in vivo*, increased fibroblast proliferation, and enhanced chemotaxis and phagocytosis in neutrophils. The MAb1 antibody can neutralize the bioactivity of natural or recombinant TNF-α.

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.
4. Tracey, K., *et al.* 1993. *Crit. Care Med.* 21:S415.

Related Products:

Product	Clone	Application
Biotin anti-human TNF-α	MAb11	ELISA Detection, ELISPOT Detection, ICFC, IF
Recombinant Human TNF-α	rh TNF-α	BA, ELISA
HRP Avidin	Avidin	ELISA, ELISPOT, IHC, WB
TMB Substrate Reagent Set		ELISA
ELISA Assay Diluent (5X)		ELISA
Human TNF-α ELISA MAX™ Standard		ELISA
Human TNF-α ELISA MAX™ Deluxe		ELISA

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