

Product Data Sheet

LEAF™ Purified anti-human TNF-α

Catalog # / Size: 502803 / 50 µg
502804 / 500 µg

Clone: MAb1

Isotype: Mouse IgG1, κ

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

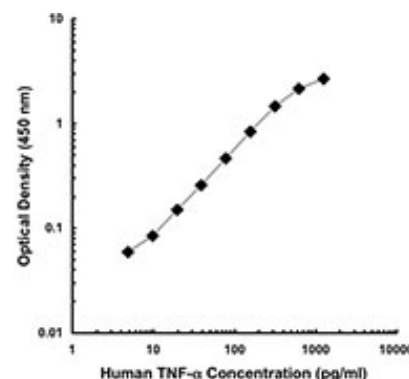
Reactivity: Human

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, WB - Reported in the literature

Recommended Usage: Each lot of this antibody is quality control tested by ELISA assay. For use as an ELISPOT capture antibody, a concentration range of 0.25-1 µg/ml is recommended. For ELISA capture applications, a concentration range of 1-4 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.

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, hemorrhagic 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
Biotin anti-human TNF-α

LEAF™ Purified Mouse IgG1, κ Isotype Ctrl
Recombinant Human TNF-α
HRP Avidin

Clone
MAb11

MOPC-21
rh TNF-α
Avidin

Application

ELISA Detection, ELISPOT
Detection, ICFC, IF
FC, ICFC, WB, IP, ICC, IF, FA
BA, ELISA
ELISA, ELISPOT, IHC, WB



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biollegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.