

## LEAF™ Purified anti-mouse / rat TNF- $\alpha$

**Catalog # / Size:** 506105 / 50  $\mu$ g  
506106 / 500  $\mu$ g

**Clone:** TN3-19.12

**Isotype:** Armenian Hamster IgG

**Immunogen:** *E. coli*-expressed, recombinant mouse TNF- $\alpha$

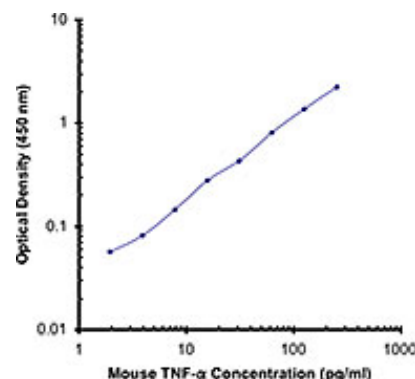
**Reactivity:** Mouse, Rat, **Cross-Reactivity:** Rabbit (Lapine)

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

**Formulation:** 0.2  $\mu$ m filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is <0.1 EU/ $\mu$ g of the protein (<0.01 ng/ $\mu$ g 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, ICFC, IP, 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 2-6  $\mu$ g/ml is recommended. To obtain a linear standard curve, serial dilutions of mouse TNF- $\alpha$  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**<sup>1</sup>: The purified TN3-19.12 antibody is useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the biotinylated Poly5062 antibody (Cat. No. 506201) as the detecting antibody for detecting mouse/rat TNF- $\alpha$ . The LEAF™ purified antibody is suggested for ELISPOT capture. For ELISPOT capture, a concentration range of 4-8  $\mu$ g/ml is recommended.

**Application References:**

1. Sheehan K, *et al.* 1989. *J. Immunol.* 142:3884.
2. Merrick BA, *et al.* 1992. *Appl. Theor. Electrophor* 2:177.
3. Takahashi S, *et al.* 1995. *Brain Res* 690:241.
4. Rabinovich R, *et al.* 1993. *J. Pharmacol. Exp. Ther.* 267:1550.
5. Molloy R, *et al.* 1993. *J. Immunol.* 151:2142.
6. Finkelman F, *et al.* 2003. *Curr. Prot. Immunol.* John Wiley & Sons, New York. Unit 6.28.

**Description:** TNF- $\alpha$  is secreted by macrophages, monocytes, neutrophils, T-cells (principally CD4<sup>+</sup>), and NK-cells. Many transformed cell lines also secrete TNF- $\alpha$ . Monomeric mouse TNF- $\alpha$  is 156 amino acid protein (N-glycosylated) with a reported molecular weight of 17.5 kD protein. TNF- $\alpha$  forms multimeric complexes; stable trimers are most common in solution. A 26 kD membrane form of TNF- $\alpha$  has also been described. TNF- $\alpha$  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 TN3-19.12 antibody reacts with mouse, rat, and rabbit tumor-necrosis factor- $\alpha$  (TNF- $\alpha$ ) proteins. The TN3-19.12 antibody can neutralize the bioactivity of natural or recombinant TNF- $\alpha$ .

**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:**

<b>Product</b>	<b>Clone</b>	<b>Application</b>
Recombinant Mouse TNF- $\alpha$	rm TNF- $\alpha$	BA, ELISA
LEAF™ Purified Armenian Hamster IgG Isotype Ctrl	HTK888	FC, ICFC, WB, IP, ICC, IF, FA



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.biolegend.com/ordering#license](http://www.biolegend.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.