

## **Product Data Sheet**

## PE anti-human TNF- $\alpha$

Catalog # / Size: 502908 / 25 tests

502909 / 100 tests

Clone: MAb11

**Isotype:** Mouse IgG1,  $\kappa$ 

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

Reactivity: Human, Cross-Reactivity: Chimpanzee, Baboon, Cynomolgus, Rhesus,

Pigtailed Macaque, Sooty Mangabey, Swine (Pig, Porcine)

Preparation: The antibody was purified by affinity chromatography, and conjugated with

PE under optimal conditions. The solution is free of unconjugated PE and

unconjugated antibody.

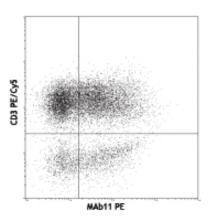
Formulation: µg format: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium

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azide, 0.2% (w/v) BSA (USA origin).

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



PMA/lonomycin-stimulated human PBMCs were stained with CD3 PE/Cy5 and MAb11 PE

## **Applications:**

Applications: ICFC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric

analysis. Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at

www.biolegend.com/testsize regarding the test size change.

Application Notes: ELISA or ELISPOT Detection: The biotinylated MAb11 antibody is useful as the detection antibody in a sandwich ELISA or ELISPOT, when used in conjunction with the purified MAb1 antibody (Cat. No. 502802/502804) as the

capture antibody

Flow Cytometry<sup>3,5,6</sup>: The fluorochrome-labeled MAb11 antibody is useful for intracellular immunofluorescent staining

and flow cytometric analysis to identify TNF-α -producing cells within mixed cell populations. Additional reported applications (for the relevant formats) include: neutralization<sup>1,2</sup>, immunohistochemical Additional reported applications (for the relevant formats) include. Neutralization in minumination in the relevant formats) includes and interested frozen tissue sections and immunocytochemistry. The MAb11 antibody can neutralize the bioactivity of natural or recombinant TNF-α.

Note: For testing human TNF-α in serum or plasma, BioLegend's ELISA Max<sup>TM</sup> Sets (Cat. No. 430201 to 430206) are specially developed and recommended. The LEAF<sup>TM</sup> purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for neutralization of human TNF-α bioactivity (Cat. No. 502922).

Application References: 1. Rathjen D, et al. 1991. Mol. Immunol. 28:79. (Neut)

2. Danis V, *et al.* 1991. *Clin. Exp. Immunol.* 85:143. (Neut) 3. Enr quez J, *et al.* 2002. *Adv. Perit. Dial.* 18:177. (ICFC)

4. Andersson U, et al. 1999. Detection and quantification of gene expression. New York: Springer-Verlag. (IHC)

5. Chen H, et al. 2005. J. Immunol. 175:591. (ICFC)

6. Iwamoto S, et al. 2007. J. Immunol. 179:1449. (ICFC) PubMed 7. Andersson U, et al. 2000. J. Exp. Med. 192:565. (ICC) 8. Moormann AM, et al. 1999. J. Infect. Dis. 180:1987. (IHC)

**Description:** TNF- $\alpha$  is secreted by macrophages, monocytes, neutrophils, T cells (principally CD4+), and NK cells. Many transformed cell lines also secrete TNF- $\alpha$ . Monomeric human TNF- $\alpha$  is a 157 amino acid protein (non-glycosylated) with a reported molecular weight of 17 kD. 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 biological 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.

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** MOPC-21 PE Mouse IgG1, κ Isotype Ctrl FC, ICFC





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Cell Staining Buffer Fixation Buffer Permeabilization Wash Buffer (10X) RBC Lysis Buffer (10X) Brefeldin A Solution (1,000X) Monensin Solution (1,000X) PE Mouse IgG1,  $\kappa$  Isotype Ctrl (ICFC)

FC, ICC, ICFC ICC, ICFC ICC, ICFC, IHC FC, ICFC ICFC ICFC ICFC

MOPC-21



