

Product Data Sheet

PerCP/Cy5.5 anti-human TNF- α

Catalog # / Size: 502925 / 25 tests

502926 / 100 tests

Clone: MAb11

Isotype: Mouse IgG1, κ

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

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

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

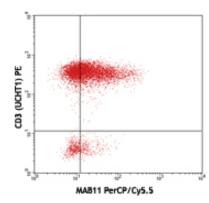
Preparation: The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

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

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

Storage: The TNF-α antibody solution should be stored undiluted at 4°C, and

protected from prolonged exposure to light. Do not freeze.



PMA + ionomycin-stimulated (6 hours) human peripheral blood lymphocytes intracellular stained with MAB11 PerCP/Cy5.5 and CD3 (UCHT1) 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. For immunofluorescent staining, the suggested use of this reagent is 5 µl per million cells or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and 564 nm and a maximum emission of 690 nm.

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^{3,5,6}: 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^{1,2}, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections⁴ and acetone-fixed frozen tissue sections⁸, and immunocytochemistry⁷. 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[™] Sets (Cat. No. 430201 to 430206) are specially developed and recommended. The LEAF[™] 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).

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.

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-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 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



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PerCP/Cy5.5 Mouse IgG1, κ Isotype Ctrl Cell Staining Buffer RBC Lysis Buffer (10X) Human TruStain FcX[™] (Fc Receptor Blocking Solution) Fixation Buffer Permeabilization Wash Buffer (10X) Monensin Solution (1,000X) Brefeldin A Solution (1,000X)

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