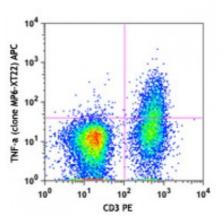
Product Data Sheet

APC anti-mouse TNF-α

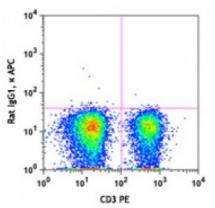
Catalog # / Size:	3131535 / 25 μg 3131540 / 100 μg
Clone:	MP6-XT22
Isotype:	Rat IgG1, к
Immunogen:	<i>E. coli</i> -expressed, recombinant mouse TNF- α
Reactivity:	Mouse
Preparation:	The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.2



PMA + lonomycin-stimulated C57BL/6 mouse splenocytes (in the presence of monensin) were stained with CD3 PE, fixed, permeabilized and then stained with TNF- α (clone MP6-XT22) APC (top) or rat IgG1, κ APC isotype control (bottom).

Applications:

Applications:	Flow Cytometry
Recommended Usage:	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 0.25 microg per 10 ⁶ cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes:	ELISA or ELISPOT Detection: The biotinylated MP6-XT22 antibody is useful as a detection antibody for a sandwich ELISA or ELISPOT assay, when used in conjunction with purified 6B8 antibody (Cat. No. 510802/510804) as the capture antibody. Flow Cytometry^{6,11,12}: The fluorochrome-labeled MP6-XT22 antibody is useful for intracellular immunofluorescent staining and flow cytometric analysis to identify TNF- α -producing cells within mixed cell populations.
	Neutralization ^{1,5,10,16,17} : The MP6- XT22 antibody can neutralize the bioactivity of natural or recombinant TNF- α . The LEAF ^{m} purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for



Application References:	neutralization of mouse TNF- α bioactivity <i>in vivo</i> and <i>in vitro</i> (Cat. No. 506310). For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra- LEAF TM purified antibody (Cat. No. 506322) with a lower endotoxin limit than standard LEAF TM purified antibodies (Endotoxin <0.01 EU/microg). Additional reported applications (for the relevant formats) include: Western blotting, immunohistochemical staining of paraformaldehyde-fixed, saponin-treated frozen tissue sections ⁷⁻⁵ <i>i. in vivo</i> detection5, immunofluorescence, and immunocytochemistry. Note: For testing mouse TNF- α in serum, plasma or supernatant, Biolegend's ELISA Max TM Sets (Cat. No. 430901 to 430906) are specially developed and recommended. 1 . Abrams J, <i>et al.</i> 1992. <i>Immunol. Rev.</i> 127:5. (Neut) 2. Abrams J, <i>et al.</i> 1995. <i>J. Virol.</i> 69:1288. 4. Sarawar S, <i>et al.</i> 1995. <i>J. Virol.</i> 69:1288. 4. Sarawar S, <i>et al.</i> 1995. <i>J. Virol.</i> 69:1288. 4. Sarawar S, <i>et al.</i> 1995. <i>J. Immunol.</i> 153:1246. 5. Via C, <i>et al.</i> 2001. <i>J. Immunol.</i> 167:6821. (Neut) 6. Infante-Duarte C, <i>et al.</i> 2000. <i>J. Immunol.</i> 155:1240. 5. Via C, <i>et al.</i> 2001. <i>J. Immunol.</i> 167:577. (IHC) 9. Williams RO, <i>et al.</i> 2000. <i>J. Immunol.</i> 165:5240. (IHC) 10. Scanga CA, <i>et al.</i> 1999. <i>Infect. Immunol.</i> 165:3240. (IHC) 11. Akliov OE, <i>et al.</i> 2000. <i>J. Immunol.</i> 165:3240. (IHC) 12. Lawson BR, <i>et al.</i> 2007. <i>J. Leukoc. Biol.</i> 2007; 10.1189/jlb.0706439. (FC) 13. Patole PS, <i>et al.</i> 2005. <i>J. Am. Soc. Nephrol.</i> 16:3273. PubMed 14. Wu S, <i>et al.</i> 2005. <i>J. Am. Soc. Nephrol.</i> 16:3273. PubMed 15. Carlson MJ, <i>et al.</i> 2009. <i>Blood</i> 113:1365. 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 mouse TNF- α is a 156 amino acid protein (N-glycosylated) with a reported

mouse TNF- α is a 156 amino acid protein (N-glycosylated) with a reported molecular weight of 17.5 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.

Antigen 1. Fitzgerald K, et al. Eds. 2001. The Cytokine FactsBook. Academic Press, San **References:** Diego. 2. Beutler B, et al. 1988. Annu. Rev. Biochem. 57:505.

- 3. Beutler B, et al. 1989. Annu. Rev. Immunol. 7:625.