



Rat Anti-Mouse TNF- α

Cat. No.	Format	Size
10230-01	Purified (UNLB)	0.5 mg
10230-02	Fluorescein (FITC)	0.1 mg
10230-08	Biotin (BIOT)	0.5 mg
10230-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg

Overview

Clone	MP6-XT22
Isotype	Rat IgG ₁ κ
Immunogen	<i>E. coli</i> -expressed mouse TNF- α
Specificity	Mouse/Chicken TNF- α
Alternate Name(s)	Tumor necrosis factor- α , macrophage cytotoxic factor , MCF, differentiation inducing factor, DIF, cachectin, necrosin, TNFSF-2

Applications

ELISA-Capture – Quality tested ^{2,3}
 ELISA-Detection – Quality tested ^{1,4}
 FC – Quality tested ⁶⁻¹²
 ELISPOT-Capture – Reported in literature ⁵
 IHC-FS – Reported in literature ¹³⁻¹⁹
 IHC-PS – Reported in literature ¹⁶
 ICC – Reported in literature ^{20,21}
 WB – Reported in literature ²¹
 Neut – Reported in literature ^{1,22-24}
 Multiplex-Detection – Reported in literature ²⁵

Working Dilutions

ELISA	Purified (UNLB) antibody	$\leq 2 \mu\text{g/mL}$
	BIOT conjugate	1:2,000 – 1:4,000
Flow Cytometry	FITC conjugate	$\leq 1 \mu\text{g}/10^6$ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL	
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg labeled antibody in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

1. Abrams JS, Roncarolo M, Yssel H, Andersson U, Gleich GJ, Silver JE. Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. *Immunol Rev.* 1992;127:5-24. (ELISA-Detection, Neut)
2. Heinzel FP, Rerko RM, Ahmed F, Hujer AM. IFN- γ -independent production of IL-12 during murine endotoxemia. *J Immunol.* 1996;157:4521-8. (ELISA-Capture)
3. Bordmann G, Rudin W, Favre N. Immunization of mice with phosphatidylcholine drastically reduces the parasitaemia of subsequent Plasmodium chabaudi chabaudi blood-stage infections. *Immunology.* 1998;94:35-40. (ELISA-Capture)
4. Abrams JS. Immunozytometric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. *Curr Protoc Immunol.* 2001;6.20:1-15. (ELISA-Detection)
5. Favre N, Bordmann G, Rudin W. Comparison of cytokine measurements using ELISA, ELISPOT and semi-quantitative RT-PCR. *J Immunol Methods.* 1997;204:57-66. (ELISPOT-Capture)
6. Tripp RA, Moore D, Jones L, Sullender W, Winter J, Anderson LJ. Respiratory syncytial virus G and/or SH protein alters Th1 cytokines, natural killer cells, and neutrophils responding to pulmonary infection in BALB/c mice. *J Virol.* 1999;73:7099-107. (FC)
7. Asseman C, Mauze S, Leach MW, Coffman RL, Powrie F. An essential role for interleukin 10 in the function of regulatory T cells that inhibit intestinal inflammation. *J Exp Med.* 1999;190:995-1003. (FC)
8. Satoh M, Yasunami Y, Matsuoka N, Nakano M, Itoh T, Nitta T, et al. Successful islet transplantation to two recipients from a single donor by targeting proinflammatory cytokines in mice. *Transplantation.* 2007;83:1085-92. (FC)
9. Hamada H, Garcia-Hernandez Mde L, Reome JB, Misra SK, Strutt TM, McKinstry KK, et al. Tc17, a unique subset of CD8 T cells that can protect against lethal influenza challenge. *J Immunol.* 2009;182:3469-81. (FC)
10. Voß EV, Škuljec J, Gudi V, Skripuletz R, Pul R, Trebst C, et al. Characterisation of microglia during de- and remyelination: can they create a repair promoting environment?. *Neurobiol Dis.* 2012;45:519-28. (FC)
11. Le Huu D, Matsushita T, Jin G, Hamaguchi Y, Hasegawa M, Takehara K, et al. Donor-derived regulatory B cells are important for suppression of murine sclerodermatous chronic graft-versus-host disease. *Blood.* 2013;121:3274-83. (FC)
12. Nakamura T, Nakao T, Yoshimura N, Ashihara E. Rapamycin prolongs cardiac allograft survival in a mouse model by inducing myeloid-derived suppressor cells. *Am J Transplant.* 2015 May 5. doi: 10.1111/ajt.13276. [Epub ahead of print]. (FC)
13. Hunter CA, Litton MJ, Remington JS, Abrams JS. Immunocytochemical detection of cytokines in the lymph nodes and brains of mice resistant or susceptible to toxoplasmic encephalitis. *J Infect Dis.* 1994;170:939-45. (IHC-FS)
14. Sunnemark D, Ulfgren A, Örn A, Harris RA. Cytokine production in hearts of Trypanosoma cruzi-infected CBA mice: Do cytokine patterns in chronic stage reflect the establishment of myocardial pathology?. *Scand J Immunol.* 1996;44:421-9. (IHC-FS)
15. Marinova-Mutafchieva L, Williams RO, Mason LJ, Mauri C, Feldmann M, Maini RN. Dynamics of proinflammatory cytokine expression in the joints of mice with collagen-induced arthritis (CIA). *Clin Exp Immunol.* 1997;107:507-12. (IHC-FS)
16. Whiteland JL, Shimeld C, Nicholls SM, Easty DL, Williams NA, Hill TJ. Immunohistochemical detection of cytokines in paraffin-embedded mouse tissues. *J Immunol Methods.* 1997;210:103-8. (IHC-FS, IHC-PS)
17. Issazadeh S, Abdallah K, Chitnis T, Chandraker A, Wells AD, Turka LA, et al. Role of passive T-cell death in chronic experimental autoimmune encephalomyelitis. *J Clin Invest.* 2000;105:1109-16. (IHC-FS)
18. Jacobs M, Brown N, Allie N, Gulert R, Ryffel B. Increased resistance to mycobacterial infection in the absence of interleukin-10. *Immunology.* 2000;100:494-501. (IHC-FS)
19. Williams RO, Marinova-Mutafchieva L, Feldmann M, Maini RN. Evaluation of TNF- α and IL-1 blockade in collagen-induced arthritis and comparison with combined anti-TNF- α /anti-CD4 therapy. *J Immunol.* 2000;165:7240-5. (IHC-FS)
20. Sanders EJ, Prasad S, Hu N, Wride MA. Cell death in the gastrulating chick embryo: potential roles for tumor necrosis factor- α (TNF- α). *Cell Death Differ.* 1997;4:188-99. (ICC, Chicken Reactivity)
21. Wride MA, Sanders EJ. Expression of tumor necrosis factor- α (TNF α)-cross-reactive proteins during early chick embryo development. *Dev Dyn.* 1993;198:225-39. (ICC, WB, Chicken Reactivity)
22. Scanga CA, Mohan VP, Joseph H, Yu K, Chan J, Flynn JL. Reactivation of latent tuberculosis: variations on the Cornell murine model. *Infect Immun.* 1999;67:4531-8. (Neut)
23. Via CS, Shustov A, Rus V, Lang T, Nguyen P, Finkelman FD. In vivo neutralization of TNF- α promotes humoral autoimmunity by preventing the induction of CTL. *J Immunol.* 2001;167:6821-6. (Neut)
24. Zhou R, Wei H, Sun R, Tian Z. Recognition of double-stranded RNA by TLR3 induces severe small intestinal injury in mice. *J Immunol.* 2007;178:4548-56. (Neut)
25. Muir BW, Barden MC, Rylatt DB, Maeji NJ, Hillyard CJ, Gorse AJ, et al, inventors. Bio-Layer Pty Limited, assignee. Use of metal complexes. United States patent US 8,168,445 B2.2012 May 1. (Multiplex-Detection)

TB10230
20-Aug-15

Corporate Offices: 160 Oxmoor Blvd • Birmingham, AL 35209 • USA Mailing Address: P.O. Box 26221 • Birmingham, AL 35260 • USA

Tel: 205.945.1774 • U.S. and Canada: 800.722.2255 • Fax: 205.945.8768

Email: info@southernbiotech.com • Website: www.southernbiotech.com