

Datasheet: MCA1488EL

Description:	RAT ANTI MOUSE TNF ALPHA:Low Endotoxin
Specificity:	TNF ALPHA
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	MP6-XT22
Isotype:	IgG1
Quantity:	0.5 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1ug/ml - 10ug/ml
Western Blotting			▪	
Functional Assays	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) **Membrane permeabilization is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

Target Species	Mouse
Species Cross Reactivity	Reacts with: Rat N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	<0.01 EU/ug

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant murine TNF alpha expressed in <i>E. coli</i> .
External Database Links	<p>UniProt: P06804 Related reagents</p> <p>Entrez Gene: 21926 Tnf Related reagents</p>
Synonyms	Tnfa, Tnfsf2
Specificity	<p>Rat anti Mouse TNF alpha antibody, clone MP6-XT22 recognizes mouse tumor necrosis factor alpha (TNF alpha), a ~17 KDa cytokine produced by monocytes, macrophages, neutrophils, NK cells and CD4+ T cells. TNF alpha forms dimers and trimers, and is also found as a 26KDa integral membrane protein. Mouse TNF alpha has cytolytic activity against many tumor cell lines, and has an important immuno-regulatory role.</p> <p>Rat anti Mouse TNF alpha antibody, clone MP6-XT22 is reported to neutralize the effects of mouse TNF alpha (Gaup et al. 2008 and Yang et al. 1995).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Hostager, B.S. & Bishop, G.A. (2002) Role of TNF receptor-associated factor 2 in the activation of IgM secretion by CD40 and CD120b. J Immunol. 168 (7): 3318-22. Gholami, M. et al. (2015) Selenium effect on ischemia-reperfusion injury of gastrocnemius muscle in adult rats. Biol Trace Elem Res. 164 (2): 205-11. Ross, S.E. et al. (1997) Suppression of TNF-alpha expression, inhibition of Th1 activity, and amelioration of collagen-induced arthritis by rolipram. J Immunol. 159 (12): 6253-9. Gaupp, S. et al. (2008) Amelioration of experimental autoimmune encephalomyelitis in IL-4Ralpha-/- mice implicates compensatory up-regulation of Th2-type cytokines. Am J Pathol. 173: 119-29. Yang, J. et al. (1995) Involvement of natural killer cells in nitric oxide production by spleen cells after stimulation with <i>Mycobacterium bovis</i> BCG. Study of the mechanism of the different abilities of viable and killed BCG. J Immunol. 155 (12): 5728-35. Ruan, L. et al. (2009) Amyloid deposition and inflammation in APPswe/PS1dE9 mouse model of Alzheimer's disease. Curr Alzheimer Res. 6: 531-40. Nahrendorf, M. et al. (2007) The healing myocardium sequentially mobilizes two monocyte subsets with divergent and complementary functions. J Exp Med. 204: 3037-47. Jordan, M.B. et al. (2004) An animal model of hemophagocytic lymphohistiocytosis (HLH): CD8+ T cells and interferon gamma are essential for the disorder. Blood. 104: 735-43. Hanada, T. et al. (2006) IFNgamma-dependent, spontaneous development of colorectal carcinomas in SOCS1-deficient mice. J Exp Med. 203: 1391-7. Lee, Y.L. et al. (2003) Oral administration of <i>Agaricus blazei</i> (H1 strain) inhibited tumor growth in a sarcoma 180 inoculation model. Exp Anim. 52: 371-5. Ramakrishna, C. et al. (2004) Differential regulation of primary and secondary CD8+ T cells in the central nervous system. J Immunol. 173: 6265-73. O'Dea, K.P. et al. (2011) Regulation of monocyte subset proinflammatory responses within the lung microvasculature by the p38 MAPK/MK2 pathway. Am J Physiol Lung Cell Mol Physiol. 301: L812-21. Lee JK et al. (2015) Iron accumulation promotes TACE-mediated TNF-α secretion and

neurodegeneration in a mouse model of ALS. [Neurobiol Dis. 80: 63-9.](#)

Further Reading 1. Abrams, J.S. *et al.* (1992) Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. [Immunol Rev. 127: 5-24.](#)

Storage Store at -20°C only.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life 18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10162 available at: 10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...) [DyLight®800](#)
Goat Anti Rat IgG (STAR73...) [RPE](#)
Rabbit Anti Rat IgG (STAR21...) [HRP](#)
Rabbit Anti Rat IgG (STAR17...) [FITC](#)
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) [DyLight®549](#), [DyLight®649](#), [DyLight®800](#)
Goat Anti Rat IgG (STAR131...) [Alk. Phos.](#), [Biotin](#)
Goat Anti Rat IgG (STAR69...) [FITC](#)
Goat Anti Rat IgG (STAR72...) [HRP](#)

Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL:Low Endotoxin \(MCA1211EL\)](#)

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