

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	<p>Reacts with: Rat</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
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
RRID	AB_567241
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 ~26 kDa integral membrane protein. Mouse TNF alpha has cytolytic activity against many tumor cell lines, and has an important immunoregulatory role.</p> <p>Rat anti Mouse TNF alpha antibody, clone MP6-XT22 is reported to neutralize the effects of mouse TNF alpha (Gaup <i>et al.</i> 2008 and Yang <i>et al.</i> 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"> 1. 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. 2. Gholami, M. <i>et al.</i> (2015) Selenium effect on ischemia-reperfusion injury of gastrocnemius muscle in adult rats. Biol Trace Elem Res. 164 (2): 205-11. 3. Ross, S.E. <i>et al.</i> (1997) Suppression of TNF-alpha expression, inhibition of Th1 activity, and amelioration of collagen-induced arthritis by rolipram. J Immunol. 159 (12): 6253-9. 4. Gaupp, S. <i>et al.</i> (2008) Amelioration of experimental autoimmune encephalomyelitis in IL-4Ralpha-/- mice implicates compensatory up-regulation of Th2-type cytokines. Am J Pathol. 173: 119-29. 5. Yang, J. <i>et al.</i> (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.

6. Ruan, L. *et al.* (2009) Amyloid deposition and inflammation in APPswe/PS1dE9 mouse model of Alzheimer's disease. [Curr Alzheimer Res. 6: 531-40.](#)
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13. 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.](#)
14. Gholami, M.R. *et al.* (2020) Protective effects of honey, *Apis mellifera meda*. skorikov, on ischemia-reperfusion induced muscle injury. [Int J Morphol., 38 \(3\): 804-10,](#)

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.

Guarantee 12 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

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@650 , DyLight@800
Goat Anti Rat IgG (STAR72...)	HRP

Rabbit Anti Rat IgG (STAR21...)

[HRP](#)

Rabbit Anti Rat IgG (STAR17...)

[FITC](#)

Goat Anti Rat IgG (STAR131...)

[Alk. Phos.](#), [Biotin](#)

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