

Datasheet: MCA1488

BATCH NUMBER 158108

Description:	RAT ANTI MOUSE TNF ALPHA
Specificity:	TNF ALPHA
Format:	Purified
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)	▪			1/10 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1ug/ml - 10ug/ml
Western Blotting			▪	

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 permeabilisation 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	0.09% Sodium Azide
Carrier Free	Yes
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_323519
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 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.

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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. <i>et al.</i> (1992) Strategies of anti-cytokine monoclonal antibody development: immunoassay of IL-10 and IL-5 in clinical samples. Immunol Rev. 127: 5-24.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>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.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	<p>Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1488</p> <p>10040</p>
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) [DyLight®550](#), [DyLight®650](#), [DyLight®800](#)

Goat Anti Rat IgG (STAR131...)

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

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