

Datasheet: MCA1560PE

Description:	RAT ANTI HUMAN TNF ALPHA:RPE
Specificity:	TNF ALPHA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MP9-20A4
Isotype:	IgG1
Quantity:	100 TESTS

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)	▪			Neat

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. 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	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
	5% Sucrose		
External Database Links	UniProt:		

Entrez Gene:

Synonyms	TNFA, TNFSF2
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RRID	AB_322497
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Specificity	<p>Rat anti Human TNF alpha antibody, clone MP9-20A4 recognizes human tumor Necrosis Factor - alpha (TNF alpha), also known as TNFSF2. This ~17kDa cytokine is expressed by activated macrophages, monocytes, neutrophils, T cells and NK cells.</p> <p>Rat anti Human TNF alpha antibody, clone MP9-20A4 is reported to act as a blocking antibody (Abrams et al. 2001).</p>
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Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. 9&vers=NA">BUF09) for this purpose.
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References	<ol style="list-style-type: none">1. Butler, D.M. <i>et al.</i> (1997) DBA/1 mice expressing the human TNF-alpha transgene develop a severe, erosive arthritis: characterization of the cytokine cascade and cellular composition. J Immunol. 159 (6): 2867-76.2. Vujanovic, L. <i>et al.</i> (2010) Virally infected and matured human dendritic cells activate natural killer cells via cooperative activity of plasma membrane-bound TNF and IL-15. Blood. 116: 575-83.3. Abrams, J.S. (2001) Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. Curr Protoc Immunol. Chapter 6: Unit 6.20.4. Evans HG <i>et al.</i> (2009) <i>In vivo</i> activated monocytes from the site of inflammation in humans specifically promote Th17 responses. Proc Natl Acad Sci U S A. 106 (15): 6232-7.5. Kobawala TP <i>et al.</i> (2016) Significance of TNF-α and the Adhesion Molecules: L-Selectin and VCAM-1 in Papillary Thyroid Carcinoma. J Thyroid Res. 2016: 8143695.6. Mann, E.R. <i>et al.</i> (2016) Compartment-specific immunity in the human gut: properties and functions of dendritic cells in the colon versus the ileum. Gut. 65 (2): 256-70.7. Kumagai, M. <i>et al.</i> (2012) Effective transgene expression without toxicity by intraperitoneal administration of PEG-detachable polyplex micelles in mice with peritoneal dissemination. J Control Release. 160 (3): 542-51.8. Poussin C <i>et al.</i> (2014) Mechanism of an indirect effect of aqueous cigarette smoke extract on the adhesion of monocytic cells to endothelial cells in an <i>in vitro</i> assay revealed by transcriptomics analysis. Toxicol In Vitro. 28 (5): 896-908.
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Further Reading	<ol style="list-style-type: none">1. Kadowaki, N. <i>et al.</i> (2000) Natural interferon alpha/beta-producing cells link innate and adaptive immunity. J Exp Med. 192 (2): 219-26.
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Storage	Store at +4°C. DO NOT FREEZE.
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This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at:
20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG1 NEGATIVE CONTROL:RPE \(MCA6004PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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