

Datasheet: MCA2154A488

Description:	RAT ANTI MOUSE TLR4/MD-2:Alexa Fluor® 488
Specificity:	TLR4/MD-2
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	MTS510
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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	▪			Neat

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.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Alexa Fluor® 488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
Immunogen	Ba/F3 cell line transfected with mouse TLR4 and MD-2.		
External Database Links	UniProt: Q9QUK6 Related reagents		

Entrez Gene:

[21898](#) Tlr4 [Related reagents](#)

Synonyms	Lps
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RRID	AB_2205141
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Specificity	<p>Rat anti Mouse TLR4/MD-2 antibody, clone MTS510 recognizes mouse toll-like receptor 4 (TLR4), when associated with MD-2 and co-precipitates MD-2 with TLR4. Rat anti Mouse TLR4/MD-2 antibody, clone MTS510 does not detect TLR4 alone. TLR4 mediates the innate immune response to bacterial lipopolysaccharide through co-operation with MD-2 and CD14.</p> <p>Clone Rat anti Mouse TLR4/MD-2 antibody, clone MTS510 has been reported to block LPS-induced cytokine production.</p> <p>N.B. Clone MTS510 binds to an epitope of TLR4/MD-2 that is lost after LPS stimulation (Akashi <i>et al.</i> 2003).</p>
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Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).</p>
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References	<ol style="list-style-type: none">1. Akashi, S. <i>et al.</i> (2003) Lipopolysaccharide interaction with cell surface Toll-like receptor 4-MD-2: higher affinity than that with MD-2 or CD14. J Exp Med. 198 (7): 1035-42.2. Sack, U. <i>et al.</i> (2005) A novel model of fibroblast-mediated cartilage destruction. Scand J Immunol. 61 (1): 18-28.3. Dimayuga, F.O. <i>et al.</i> (2005) Estrogen and brain inflammation: effects on microglial expression of MHC, costimulatory molecules and cytokines. J Neuroimmunol. 161 (1-2): 123-36.4. Stott, B. & Korbelik, M. (2007) Activation of complement C3, C5, and C9 genes in tumors treated by photodynamic therapy. Cancer Immunol Immunother. 56 (5): 649-58.5. Becker, M. <i>et al.</i> (2006) Expression of the class A macrophage scavenger receptor on specific subpopulations of murine dendritic cells limits their endotoxin response. Eur J Immunol. 36 (4): 950-60.
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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. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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Guarantee	12 months from date of despatch
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Health And Safety Information Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA1212A488\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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