

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	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®488</td> <td>495</td> <td>519</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
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	<p>UniProt: Q9QUK6 Related reagents</p> <p>Entrez Gene: 21898 Tlr4 Related reagents</p>						
Synonyms	Lps						

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 et al. 2003).</p>
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>
References	<ol style="list-style-type: none"> 1. Akashi, S. <i>et al.</i> (2000) Cutting edge: cell surface expression and lipopolysaccharide signaling via the toll-like receptor 4-MD-2 complex on mouse peritoneal macrophages. J Immunol. 164 (7): 3471-5. 2. 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. 3. Akashi, S. <i>et al.</i> (2000) Cutting edge: cell surface expression and lipopolysaccharide signaling via the toll-like receptor 4-MD-2 complex on mouse peritoneal macrophages. J Immunol. 164 (7): 3471-5. 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. 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. 6. 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. 7. Sack, U. <i>et al.</i> (2005) A novel model of fibroblast-mediated cartilage destruction. Scand J Immunol. 61 (1): 18-28.
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>
Shelf Life	<p>18 months from date of despatch.</p>
Acknowledgements	<p>This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes</p>

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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 \(BUF041B\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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