

## Datasheet: MCA2154T

<b>Description:</b>	RAT ANTI MOUSE TLR4/MD-2
<b>Specificity:</b>	TLR4/MD-2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MTS510
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	25 µg

## 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<b>Immunogen</b>	Ba/F3 cell line transfected with mouse TLR4 and MD-2.

**External Database  
Links**

**UniProt:**

[Q9QUK6](#)   [Related reagents](#)

**Entrez Gene:**

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

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**Synonyms**

Lps

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**RRID**

AB\_2205140

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**Specificity**

**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.

Clone Rat anti Mouse TLR4/MD-2 antibody, clone MTS510 has been reported to block LPS-induced cytokine production.

N.B. Clone MTS510 binds to an epitope of TLR4/MD-2 that is lost after LPS stimulation ([Akashi \*et al.\* 2003](#)).

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Akashi, S. *et al.* (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. *et al.* (2005) A novel model of fibroblast-mediated cartilage destruction. [Scand J Immunol. 61 \(1\): 18-28.](#)
3. Dimayuga, F.O. *et al.* (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. *et al.* (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**

Store at +4°C or at -20°C if preferred.

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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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