

## Datasheet: MCA94R

**BATCH NUMBER 150341**

<b>Description:</b>	MOUSE ANTI RAT MHC CLASS I RT1A
<b>Specificity:</b>	MHC CLASS I RT1A
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	F16-4-4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.25 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/100 - 1/200
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>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Partially purified rat MHC antigens.
<b>RRID</b>	AB_323205
<b>Fusion Partners</b>	Spleen cells of immunised BALB/c mice were fused with cells from the NS-1 mouse myeloma line.
<b>Specificity</b>	<p><b>Mouse anti Rat MHC Class I RT1A antibody, clone F16-4-4</b> recognizes the rat RT1A MHC class I antigen binding to a monomorphic epitope expressed by all rat strains, although strains of haplotype c more weakly.</p> <p>Mouse anti Rat MHC Class I RT1A antibody, clone F16-4-4 is routinely tested in flow cytometry on rat splenocytes.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>Hart, D.N.J. and Fabre, J.W. (1981) Major histocompatibility complex antigens in rat kidney, ureter, and bladder. Localization with monoclonal antibodies and demonstration of Ia-positive dendritic cells <a href="#">Transplantation. 31: 318-325.</a></li> <li>Hart, D.N.J. and Fabre, J.W. (1981) Problems in the use of erythrocytes for RT1.A typing studies, probably due to quantitative differences in RT1.A antigen expression in different strains. <a href="#">Transplantation Proceedings. 13: 1329-1322.</a></li> <li>Mclellan, A. D. <i>et al.</i> (1999) Induction of dendritic cell costimulator molecule expression is suppressed by T cells in the absence of antigen-specific signalling: role of cluster formation, CD40 and HLA-class II for dendritic cell activation <a href="#">Immunology. 98:171-180.</a></li> <li>Tuncel J <i>et al.</i> (2014) Natural polymorphisms in Tap2 influence negative selection and CD4:CD8 lineage commitment in the rat. <a href="#">PLoS Genet. 10 (2): e1004151.</a></li> <li>Hart, D.N. &amp; Fabre, J.W. (1981) Demonstration and characterization of Ia-positive dendritic cells in the interstitial connective tissues of rat heart and other tissues, but not brain. <a href="#">J Exp Med. 154 (2): 347-61.</a></li> <li>Carayon K <i>et al.</i> (2011) Proteolipidic composition of exosomes changes during reticulocyte maturation. <a href="#">J Biol Chem. 286 (39): 34426-39.</a></li> </ol>
<b>Storage</b>	<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>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA94R">https://www.bio-rad-antibodies.com/SDS/MCA94R</a></p> <p>10040</p>

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

<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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M369219:200529'

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