

Datasheet: MCA2398

**BATCH NUMBER 166387**

<b>Description:</b>	RAT ANTI MOUSE MHC CLASS I H-2b/d/p/q/w16
<b>Specificity:</b>	MHC CLASS I H-2b/d/p/q/w16
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ER-HR52
<b>Isotype:</b>	IgG2a
<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	▪			1/50 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

Where this product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<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 (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Adherent FI (CBAXBL) bone marrow stromal cells.
<b>RRID</b>	AB_872030
<b>Fusion Partners</b>	Cells from immunized rats were fused with cells of the mouse P3-X63-Ag8.563 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse MHC Class I H-2b/D/P/Q/w16 antibody, clone ER-HR52</b> recognizes a polymorphic epitope present on murine MHC class I molecules, which are expressed at varying levels on the majority of nucleated cells.</p> <p>Clone ER-HR52 specifically recognizes mouse strains with the haplotypes H-2b, w16 and H-2d, p, q. Mouse strains with the haplotypes H-2f, r, s, w17, w23, w27 show weak reactivity with this antibody.</p> <p>The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In mice, this complex is referred to as the histocompatibility 2 (H-2) region.</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Medana, I. <i>et al.</i> (2001) Transection of major histocompatibility complex class I-induced neurites by cytotoxic T lymphocytes. <a href="#">Am J Pathol. 159 (3): 809-15.</a></li> <li>2. Himoudi, N. <i>et al.</i> (2009) Migratory and antigen presentation functions of IFN-producing killer dendritic cells. <a href="#">Cancer Res. 69 (16): 6598-606.</a></li> <li>3. Liu, J. <i>et al.</i> (2013) The expression pattern of classical MHC class I molecules in the development of mouse central nervous system. <a href="#">Neurochem Res. 38 (2): 290-9.</a></li> <li>4. Lv, D. <i>et al.</i> (2014) The similar expression pattern of MHC class I molecules in human and mouse cerebellar cortex. <a href="#">Neurochem Res. 39 (1): 180-6.</a></li> <li>5. Liu, J. <i>et al.</i> (2015) Spatial-Temporal Expression of Non-classical MHC Class I Molecules in the C57 Mouse Brain. <a href="#">Neurochem Res. 40 (7): 1487-96.</a></li> <li>6. Lv, D. <i>et al.</i> (2015) Neuronal MHC Class I Expression Is Regulated by Activity Driven Calcium Signaling. <a href="#">PLoS One. 10 (8): e0135223.</a></li> <li>7. Sobue, A. <i>et al.</i> (2018) Astroglial major histocompatibility complex class I following immune activation leads to behavioral and neuropathological changes. <a href="#">Glia. 66 (5): 1034-52.</a></li> </ol>
<b>Storage</b>	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2398">https://www.bio-rad-antibodies.com/SDS/MCA2398</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight®800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</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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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)  
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