

Datasheet: MCA2398

Description:	RAT ANTI MOUSE MHC CLASS I H-2b/d/p/q/w16
Specificity:	MHC CLASS I H-2b/d/p/q/w16
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	ER-HR52
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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

Target Species	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Adherent FI (CBAXBL) bone marrow stromal cells.
RRID	AB_872030
Fusion Partners	Cells from immunised rats were fused with cells of the mouse P3-X63-Ag8.563 myeloma cell line.
Specificity	<p>Rat anti Mouse MHC Class I H-2b/D/P/Q/w16 antibody, clone ER-HR52 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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	<ol style="list-style-type: none"> 1. Medana, I. <i>et al.</i> (2001) Transection of major histocompatibility complex class I-induced neurites by cytotoxic T lymphocytes. Am J Pathol. 159 (3): 809-15. 2. Lv, D. <i>et al.</i> (2015) Neuronal MHC Class I Expression Is Regulated by Activity Driven Calcium Signaling. PLoS One. 10 (8): e0135223. 3. Himoudi, N. <i>et al.</i> (2009) Migratory and antigen presentation functions of IFN-producing killer dendritic cells. Cancer Res. 69 (16): 6598-606. 4. Liu, J. <i>et al.</i> (2015) Spatial-Temporal Expression of Non-classical MHC Class I Molecules in the C57 Mouse Brain. Neurochem Res. 40 (7): 1487-96. 5. Liu, J. <i>et al.</i> (2013) The expression pattern of classical MHC class I molecules in the development of mouse central nervous system. Neurochem Res. 38 (2): 290-9. 6. Lv, D. <i>et al.</i> (2014) The similar expression pattern of MHC class I molecules in human and mouse cerebellar cortex. Neurochem Res. 39 (1): 180-6. 7. Sobue, A. <i>et al.</i> (2018) Astroglial major histocompatibility complex class I following immune activation leads to behavioral and neuropathological changes. Glia. Jan 30 [Epub ahead of print].
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. Avoid repeated freezing and thawing as this may denature the antibody.</p>

Guarantee 12 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight@800
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight@800
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

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

North & South America Tel: +1 800 265 7376

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

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

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