

Datasheet: MCA46B

Description:	MOUSE ANTI RAT MHC CLASS II RT1B:Biotin
Specificity:	MHC CLASS II RT1B
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	OX-6
Isotype:	IgG1
Quantity:	0.1 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	■			Neat - 1/10
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	

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	Rat
Species Cross Reactivity	Reacts with: Mouse N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG conjugated to Biotin - liquid
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Rat thymocyte membrane glycoproteins.
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells from the NS1 mouse myeloma cell line.
Specificity	Mouse anti Rat MHC Class II RT1B antibody, clone OX-6 recognizes a monomorphic determinant of the rat RT1B MHC class II antigen present on B lymphocytes, dendritic cells, some

macrophages and certain epithelial cells.

Rat MHC Class II RT1B antibody, clone OX-6 does not react with the rat BDIX strain due to a defect in RT1B expression ([Male et al. 1987](#)).

The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In rats, this complex is referred to as the RT1 region. In mice, this complex is referred to as the H-2 region.

Mouse anti Rat MHC Class II RT1B antibody, clone OX-6 also cross reacts with a polymorphic determinant on mouse strains of the H-2 haplotypes k and s. Analysis of recombinant mouse strains has mapped the OX-6 determinant to the H-2I-A region ([McMaster and Williams 1979](#) and [Male et al. 1987](#)).

This product is routinely tested in flow cytometry on rat splenocytes.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

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12. Baca Jones, C.C. et al. (2009) Rat cytomegalovirus infection depletes MHC II in bone marrow derived dendritic cells. [Virology. 388: 78-90.](#)
13. Lobato-Pascual, A. et al. (2013) Rat macrophage C-type lectin is an activating receptor expressed by phagocytic cells. [PLoS One. 8: e57406.](#)
14. Takizawa, T. et al. (2016) High-mobility group box 1 is an important mediator of microglial activation induced by cortical spreading depression [Journal of Cerebral Blood Flow & Metabolism. May 3 \[Epub ahead of print\]](#)

15. Liu, M. *et al.* (2017) Pioglitazone Attenuates Neuroinflammation and Promotes Dopaminergic Neuronal Survival in the Nigrostriatal System of Rats after Diffuse Brain Injury. [J Neurotrauma. 34 \(2\): 414-22.](#)
16. Noailles, A. *et al.* (2018) Systemic inflammation induced by lipopolysaccharide aggravates inherited retinal dystrophy. [Cell Death Dis. 9 \(3\): 350.](#)

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	12 months from date of despatch.
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

[MOUSE IgG1 NEGATIVE CONTROL:Biotin \(MCA1209B\)](#)

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
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