

# Datasheet: MCA2687PEB

Description:	MOUSE ANTI MHC CLASS II H-2I-Ak/s:RPE
Specificity:	MHC CLASS II H-2I-Ak/s
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	OX-6
Isotype:	lgG1
Quantity:	500 TESTS

## **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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				Neat - 1/10

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 <b>N.B.</b> Antibody reactiv	species.				
Product Form	Purified IgG conjugate	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized				
Reconstitution	Reconstitute with 5.0 ml distilled water					
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)			
max =x = m	RPE 488nm laser	496	578			
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant					
Buffer Solution	Phosphate buffered saline					
Preservative	0.09% Sodium Azide					
Stabilisers	1% Bovine Serum					
	5% Sucrose					
Immunogen	Rat thymocyte membrane glycoproteins.					
Fusion Partners	Spleen cells from imn	nunised Balb/c mice v	vere fused with cells fro	om the NS1 mouse myeloma ce		

#### **Specificity**

**Mouse anti MHC Class II H-2I-Ak/s 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.

Mouse anti MHC Class II H-2I-Ak/s antibody, clone OX-6 does not react with the rat BDIX strain due to a defect in RT1B expression (Male, D. K. et al.).

Mouse anti MHC Class II H-2I-Ak/s 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 & Williams 1979) and (Maleet al. 1987).

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 H-2 region. In rats, this complex is referred to as the RT1 region.

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

#### Flow Cytometry

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

#### References

- 1. McMaster, W.R. & Williams, A.F. (1979) Identification of la glycoproteins in rat thymus and purification from rat spleen. Eur J Immunol. 9 (6): 426-33.
- 2. Fernandez, J.L. & Weeks, M. (1986) Genetic monitoring of inbred strains of mice using monoclonal antibodies to major histocompatibility haplotypes and lymphocyte alloantigens. <u>Lab Anim. 20 (4): 293-7.</u>
- 3. Charteris, D.G. & Lightman, S.L. (1993) *In vivo* lymphokine production in experimental autoimmune uveoretinitis. Immunology. 78 (3): 387-92.
- 4. Whiteland, J.L. *et al.* (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. <u>J Histochem</u> Cytochem. 43 (3): 313-20.
- 5. McKechnie, N.M. *et al.* (1997) Immunization with the cross-reactive antigens Ov39 from *Onchocerca volvulus* and hr44 from human retinal tissue induces ocular pathology and activates retinal microglia. <u>J Infect Dis. 176 (5): 1334-43.</u>
- 6. Male, D.K. *et al.* (1987) Serological evidence for a defect in RT1.B (I-A) expression by the BDIX rat strain. J Immunogenet. 14 (6): 301-12.
- 7. Meyer zu Hörste, G. *et al.* (2011) Quinpramine ameliorates rat experimental autoimmune neuritis and redistributes MHC class II molecules. <u>PLoS One. 6(6): e21223.</u>
- 8. Zhang, M. *et al.* (2015) The distinct distributions of immunocompetent cells in rat dentin pulp after pulpotomy. <u>Anat Rec (Hoboken). 298 (4): 741-9.</u>
- 9. Ledreux, A. *et al.* (2016) Detrimental effects of a high fat/high cholesterol diet on memory and hippocampal markers in aged rats <u>Behavioural Brain Research</u>. <u>Jun 22 [Epub ahead of print]</u>

### Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

#### DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

#### Shelf Life

12 months from date of reconstitution.

#### **Health And Safety**

Material Safety Datasheet documentation #10075 available at:

Information 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf

**Regulatory** For research purposes only

# **Related Products**

# **Recommended Negative Controls**

## MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA1209PE)

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700 **E**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

America Fax: +1 919 878 3751

Email: antibody\_sales\_us@bio-rad.com

'M324169:180727'

### Printed on 11 Sep 2018

© 2018 Bio-Rad Laboratories Inc | Legal | Imprint