

# Datasheet: MCA09

Description:	RAT ANTI RAT MHC CLASS II I-Ab
Specificity:	MHC CLASS II I-Ab
Format:	S/N
<b>Product Type:</b>	Monoclonal Antibody
Clone:	P7/7
Isotype:	lgG2b
Quantity:	5 ml

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

	Yes	No	Not Determined	<b>Suggested Dilution</b>
Flow Cytometry	•			Neat - 1/4
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. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own sytem using negative/positive controls.

Target Species	Rat
Species Cross Reactivity	Reacts with: Mouse  N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.
Product Form	Tissue Culture Supernatant - liquid
Preservative Stabilisers	0.1% Sodium Azide
Immunogen	Cells from R8 strain rat

RRID	AB_322811	
Fusion Partners	Spleen cells from an immunised DA rat were fused with cells of myeloma cell line.	of the mouse P3/NSI/I-Ag4.1

### **Specificity**

Rat anti Rat MHC Class II I-Ab antibody, clone P7/7 recognizes the rat RT1Bu/Du MHC class II antigen and is cross reactive with haplotypes c, d, I, and n. The antibody positively stains MHC class II molecules in rat strains including PVG, F334, LEW, and BN.

Clone P7/7 also recognises mouse MHC Class II, binding to a monomorphic epitope expressed by all mouse strains.

Rat anti Rat MHC Class II I-Ab antibody, clone P7/7 has been used extensively in protocols used for the isolation of murine dendritic cells from mouse bone marrow by immunomagnetic depletion (Mölzer 2019, Siepmann 2007).

### Flow Cytometry

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

#### References

- 1. Momburg, F. *et al.* (1986) Differential expression of la and la-associated invariant chain in mouse tissues after in vivo treatment with IFN-gamma. J Immunol. 136 (3): 940-8.
- 2. Jiang, H.R. *et al* (2003) Antigen-specific inhibition of experimental autoimmune uveoretinitis by bone marrow-derived immature dendritic cells. <u>Invest Ophthalmol Vis Sci.</u> 44: 1598-607.
- 3. Taylor, N. *et al.* (2005) Enhanced tolerance to autoimmune uveitis in CD200-deficient mice correlates with a pronounced Th2 switch in response to antigen challenge. <u>J</u> Immunol. 174: 143-54.
- 4. Krasinskas, A.M. *et al.* (2000) Replacement of graft-resident donor-type antigen presenting cells alters the tempo and pathogenesis of murine cardiac allograft rejection. Transplantation. 70: 514-21.
- 5. Jiang, H.R. *et al.* (2002) Secretion of interleukin-10 or interleukin-12 by LPS-activated dendritic cells is critically dependent on time of stimulus relative to initiation of purified DC culture. J Leukoc Biol. 72: 978-85.
- 6. Jiang, H.R. *et al.* (2006) Combination of vaccination and chimeric receptor expressing T cells provides improved active therapy of tumors. J Immunol. 177: 4288-98.
- 7. Liu, Y.H. *et al.* (2018) Partial retinal photoreceptor loss in a transgenic mouse model associated with reduced levels of interphotoreceptor retinol binding protein (IRBP, RBP3). Exp Eye Res. 172: 54-65.
- 8. Mölzer, C. *et al.* (2019) TGF-β1-activated type 2 dendritic cells promote wound healing and induce fibroblasts to express tenascin c following corneal full-thickness hydrogel transplantation. <u>J Tissue Eng Regen Med. 13 (9): 1507-17.</u>
- 9. Christofi, M. *et al.* (2020) Low-dose 2-deoxy glucose stabilises tolerogenic dendritic cells and generates potent in vivo immunosuppressive effects. <u>Cell Mol Life Sci. Oct 19</u> [Epub ahead of print].
- 10. Siepmann, K. *et al.* (2007) CD4+CD25+ T regulatory cells induced by LPS-activated bone marrow dendritic cells suppress experimental autoimmune uveoretinitis *in vivo*. Graefes Arch Clin Exp Ophthalmol. 245 (2): 221-9.
- 11. Mölzer, C. et al. (2019) Activation of dendritic cells by crosslinked collagen hydrogels

(artificial corneas) varies with their composition. <u>J Tissue Eng Regen Med. 13 (9):</u> 1528-43.

12. Silva, A.B. *et al.* (2021) Understanding the role of the blood brain barrier and peripheral inflammation on behavior and pathology on ongoing confined cortical lesions Mult Scleros Rel Dis: 103346.

**Storage** 

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

## Related Products

### **Recommended Secondary Antibodies**

Goat Anti Rat IgG (STAR69...) FITC

Goat Anti Rat IgG (STAR73...) RPE

Rabbit Anti Rat IgG (STAR16...) DyLight®800

Rabbit Anti Rat IgG (STAR21...) HRP
Rabbit Anti Rat IgG (STAR17...) FITC

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

Goat Anti Rat IgG (STAR72...)

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) DyLight®650, DyLight®800

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M387966:210803'

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