Datasheet: MCA2687A488

Description:	MOUSE ANTI MHC CLASS II H-2I-Ak/s:Alexa Fluor® 488
Specificity:	MHC CLASS II H-2I-Ak/s
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	OX-6
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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

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. 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

Purified IgG conjugated to Alexa Fluor® 488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

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

	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Rat thymocyte membrane glycoproteins.
RRID	AB_931783
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells from the NS1 mouse myeloma cell line.
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 *et al.* 1987). 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 (Male *et 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. Mouse anti MHC Class II H-2I-Ak/s antibody, clone OX-6 is routinely tested in flow cytometry on rat splenocytes.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. McMaster, W.R. & Williams, A.F. (1979) Identification of Ia 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. Lab Anim. 20 (4): 293-7. 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. J Histochem 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. J Infect Dis. 176 (5): 1334-43. 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. PLoS One. 6(6): e21223.
8. Zhang, M. *et al.* (2015) The distinct distributions of immunocompetent cells in rat dentin pulp after pulpotomy. Anat Rec (Hoboken). 298 (4): 741-9.
9. Ledreux, A. *et al.* (2016) Detrimental effects of a high fat/high cholesterol diet on memory and hippocampal markers in aged rats Behavioural Brain Research. Jun 22 [Epub ahead of print]

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
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:Alexa Fluor® 488 (MCA1209A488)

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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