

Datasheet: MCA643PE

Description:	MOUSE ANTI RAT CD44:RPE
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	OX-50
Isotype:	IgG1
Quantity:	100 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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat

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		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	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 Albumin	
	5%	Sucrose	
Immunogen	Rat T cell blasts.		
External Database Links	UniProt: P26051 Related reagents		

Entrez Gene:

[25406](#) Cd44 [Related reagents](#)

Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS0/1 myeloma cell line.
Specificity	Mouse anti Rat CD44 antibody, clone OX-50 recognizes the rat CD44 cell surface antigen, also known as Extracellular matrix receptor III, P90 lymphocyte homing/adhesion receptor, HUTCH-I, Hermes antigen, Hyaluronate receptor, Phagocytic glycoprotein 1, PGP-1 or Phagocytic glycoprotein I. CD44 is a 482 amino acid ~85 kDa single pass type I transmembrane glycoprotein, expressed by T cells, B cells, macrophages and thymocytes, with expression being increased following activation.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Stevenson, K.S. <i>et al.</i> (2009) Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations. Stem Cells Dev. 18:1389-98. 2. Jiang, T.S. <i>et al.</i> (2010) Reconstruction of the corneal epithelium with induced marrow mesenchymal stem cells in rats. Mol Vis. 16: 1304-16. 3. Kanellis, J. <i>et al.</i> (2010) JNK signalling in human and experimental renal ischaemia/reperfusion injury. Nephrol Dial Transplant. 25: 2898-908. 4. Li, S. <i>et al.</i> (2010) Upregulation of CXCR4 favoring neural-like cells migration via AKT activation. Neurosci Res. 67: 293-9. 5. Stephens, L.A. <i>et al.</i> (2004) Phenotypic characterization of regulatory CD4+CD25+ T cells in rats. Int Immunol. 16: 365-75. 6. Rice, C.M. <i>et al.</i> (2010) Multipotent adult progenitor cell isolation and proliferation in cytokine and serum-free medium conditioned by rat B104 cells. Br J Haematol. 148: 441-4. 7. Carulli, D. <i>et al.</i> (2006) Composition of perineuronal nets in the adult rat cerebellum and the cellular origin of their components. J Comp Neurol. 494: 559-77. 8. Galtrey, C.M. <i>et al.</i> (2008) Distribution and synthesis of extracellular matrix proteoglycans, hyaluronan, link proteins and tenascin-R in the rat spinal cord. Eur J Neurosci. 27: 1373-90. 9. Hofmann, N. <i>et al.</i> (2002) Increased expression of ICAM-1, VCAM-1, MCP-1, and MIP-1 alpha by spinal perivascular macrophages during experimental allergic encephalomyelitis in rats. BMC Immunol. 3: 11. 10. Walther, M. <i>et al.</i> (2001) Exogenous antigen containing perivascular phagocytes induce a non-encephalitogenic extravasation of primed lymphocytes. J Neuroimmunol. 117: 30-42. 11. Suzuki, A. <i>et al.</i> (2006) Localization of CD44 and hyaluronan in the synovial membrane of the rat temporomandibular joint. Anat Rec A Discov Mol Cell Evol Biol. 288: 646-52. 12. Goransson, V. <i>et al.</i> (2004) Renal hyaluronan accumulation and hyaluronan synthase expression after ischaemia-reperfusion injury in the rat. Nephrol Dial Transplant. 19: 823-30. 13. Campbell, N.G. <i>et al.</i> (2016) Cell Size Critically Determines Initial Retention of Bone Marrow Mononuclear Cells in the Heart after Intracoronary Injection: Evidence from a Rat Model. PLoS One. 11 (7): e0158232. 14. Bejar, M.T. <i>et al.</i> (2016) Inhibition of Notch rescues the angiogenic potential impaired by cardiovascular risk factors in epicardial adipose stem cells. FASEB J. 30 (8): 2849-59. 15. Rochefort, G.Y. <i>et al.</i> (2006) Multipotential mesenchymal stem cells are mobilized into peripheral blood by hypoxia. Stem Cells. 24 (10): 2202-8. 16. Redondo, J. <i>et al.</i> (2015) Reductions in kinesin expression are associated with nitric oxide-induced axonal damage. J Neurosci Res. 93 (6): 882-92.
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 Information	Material Safety Datasheet documentation #10075 available at: 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 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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