Datasheet: MCA2057F

Description:	MOUSE ANTI HUMAN CD143:FITC
Specificity:	CD143
Other names:	ACE
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	9B9
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
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

Human

Species Cross Reactivity

Reacts with: Hamster, Monkey, Rat, Cat

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein G.

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Human lung CD143 (Angiotensin converting enzyme).
External Database Links	**UniProt:** P12821 Related reagents **Entrez Gene:** 1636 ACE Related reagents
Synonyms	DCP, DCP1
RRID	AB_322300
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse X63 - Ag8 - 653 myeloma cell line.
Specificity	**Mouse anti Human CD143 antibody, clone 9B9** recognizes human somatic CD143, also know as angiotensin - converting enzyme (ACE). CD143 exists in two forms, a ~170 kDa somatic form and a ~90 kDa germinal form. The somatic form is expressed by endothelial cells (especially those of lung capillaries and arterioles), epithelial cells (especially in proximal renal tubules and small intestine), by some neuronal cells and variably by some macrophages and T lymphocytes. The germinal form is expressed by spermatozoa. This antibody recognizes active ACE binding to an N-terminal domain epitope.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Danilov, S. *et al.* (1994) Structure-function analysis of angiotensin I-converting enzyme using monoclonal antibodies. Selective inhibition of the amino-terminal active site. J Biol Chem. 269 (43): 26806-14. 2. Metzger, R. *et al.* (2000) CD143 in the development of atherosclerosis. Atherosclerosis. 150 (1): 21-31. 3. Danilov, S.M. *et al.* (1991) Lung is the target organ for a monoclonal antibody to angiotensin-converting enzyme. Lab Invest. 64 (1): 118-24. 4. Ulrich, C. *et al.* (2011) Monocyte Angiotensin converting enzyme expression may be associated with atherosclerosis rather than arteriosclerosis in hemodialysis patients. Clin J Am Soc Nephrol. 6: 505-11. 5. Danilov, S. *et al*. (1989) Radioimmunoimaging of lung vessels: an approach using indium-111-labeled monoclonal antibody to angiotensin-converting enzyme. J Nucl Med. 30:1686-92. 6. Atochina, E. *et al*. (1998) Immunotargeting of catalase to ACE or ICAM-1 protects perfused rat lungs against oxidative stress. Am J Physiol. 275:L806-17.

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14. Fiedler, R. *et al.* (2012) Randomized controlled pilot study of 2 weeks' treatment with high cutoff membrane for hemodialysis patients with elevated C-reactive protein. Artif Organs. 36 (10): 886-93.
15. Eliasson, R. *et al.* (2013) Method and kit for cancer diagnosis. Patent Application: US 13/641,424. Publication number: US20130040849 A1.

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	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10267 available at: 10267: https://www.bio-rad-antibodies.com/uploads/MSDS/10267.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)

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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