

Datasheet: MCA2056

Description:	MOUSE ANTI HUMAN CD143
Specificity:	CD143
Other names:	ACE
Format:	S/N
<b>Product Type:</b>	Monoclonal Antibody
Clone:	2E2
Isotype:	lgG1

## **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	Suggested Dilution
Flow Cytometry			•	
Immunohistology - Frozen			•	
Immunohistology - Paraffin (1)				Neat - 1/20
ELISA				
Immunoprecipitation				
Western Blotting	-			1/50 - 1/100

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.

(1)This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human		
Species Cross Reactivity	Reacts with: Bovine, Guinea Pig, Rat, Cat, Pig, Monkey, Mouse, Dog, Rat  N.B. Antibody reactivity and working conditions may vary between species		
Product Form	Tissue Culture Supernatant - liquid		
Preservative Stabilisers	0.09% Sodium Azide		
Immunogen	Denatured Human kidney CD143 (angiotensin converting enzyme).		
External Database Links	UniProt:		
	P12821 Related reagents		

**Entrez Gene:** 

Synonyms	DCP, DCP1
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 2E2 recognizes human 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. Study of CD143 may be relevant to fertility (especially sperm-egg interactions), atherosclerosis and in drug targeting to the lung. This clone recognises denatured somatic form of ACE, binding to an epitope in the C domain, and has been reported to be active in western blotting (Balyasnikova et al. 2003).
Histology Positive Control Tissue	Kidney (lung in rat studies)
References	<ol> <li>Metzger, R. <i>et al.</i> (1999) Angiotensin-converting enzyme in non-neoplastic kidney diseases.         <u>Kidney Int. 56 (4): 1442-54.</u> </li> <li>Balyasnikova, I.V. <i>et al.</i> (2003) Monoclonal antibodies to denatured ACE (CD143) broad species specificity, reactivity on paraffin sections and detection of subtle conformational changes in the C-terminal domain of ACE. <u>Tissue Antigens. 61 (1): 49- 62.</u></li> <li>Manton, R.N. <i>et al.</i> (2016) Angiolymphoid hyperplasia with eosinophilia developing within a port wine stain. <u>J Cutan Pathol. 43 (1): 53-6.</u></li> <li>Constantino, P.B. <i>et al.</i> (2017) Exercise attenuates dexamethasone-induced hypertension through an improvement of baroreflex activity independently of the renin-angiotensin system. <a href="Steroids. 128: 147-54.">Steroids. 128: 147-54.</a></li> </ol>
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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10055 available at:  10055: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10055.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10055.pdf</a>
Regulatory	For research purposes only

# **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR76...) RPE
Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®549,

DyLight®649, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (STAR77...) HRP

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP
Rabbit Anti Mouse IgG (STAR8...) DyLight®800

Goat Anti Mouse IgG (STAR70...) FITC
Rabbit Anti Mouse IgG (STAR13...) HRP
Human Anti Mouse IgG1 (HCA036...) HRP

## **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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

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

Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_de@bio-rad.com

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

'M302300:170116'

Fax: +44 (0)1865 852 739

#### Printed on 25 May 2018

© 2018 Bio-Rad Laboratories Inc | Legal | Imprint