

## Datasheet: MCA2056

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|----------------------|------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD143 |
| <b>Specificity:</b>  | CD143                  |
| <b>Other names:</b>  | ACE                    |
| <b>Format:</b>       | S/N                    |
| <b>Product Type:</b> | Monoclonal Antibody    |
| <b>Clone:</b>        | 2E2                    |
| <b>Isotype:</b>      | IgG1                   |
| <b>Quantity:</b>     | 1 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

|                                | 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, Rabbit  
**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

|  |   |
|--|---|
| <b>Preservative Stabilisers</b>          | 0.09% Sodium Azide  |
| <b>Immunogen</b>                         | Denatured Human kidney CD143 (angiotensin converting enzyme).   |
| <b>External Database Links</b>           | <p><b>UniProt:</b><br/> <a href="#">P12821</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">1636</a> ACE    <a href="#">Related reagents</a></p>   |
| <b>Synonyms</b>                          | DCP, DCP1   |
| <b>RRID</b>                              | AB_323343   |
| <b>Fusion Partners</b>                   | Spleen cells from immunised Balb/c mice were fused with cells of the mouse X63 - Ag8 - 653 myeloma cell line.   |
| <b>Specificity</b>                       | <b>Mouse anti Human CD143 antibody, clone 2E2</b> 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 ( <a href="#">Balyasnikova et al. 2003</a> ).   |
| <b>Histology Positive Control Tissue</b> | Kidney (lung in rat studies)  |
| <b>References</b>                        | <ol style="list-style-type: none"> <li>1. Metzger, R. <i>et al.</i> (1999) Angiotensin-converting enzyme in non-neoplastic kidney diseases. <a href="#">Kidney Int. 56 (4): 1442-54.</a></li> <li>2. 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. <a href="#">Tissue Antigens. 61 (1): 49- 62.</a></li> <li>3. Manton, R.N. <i>et al.</i> (2016) Angiolymphoid hyperplasia with eosinophilia developing within a port wine stain. <a href="#">J Cutan Pathol. 43 (1): 53-6.</a></li> <li>4. 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.</a></li> </ol> |
| <b>Storage</b>                           | <p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing</p>  |

as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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| <b>Guarantee</b> | 18 months from date of despatch. |
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| <b>Health And Safety Information</b> | 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> |
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| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Secondary Antibodies

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|---|--|
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>  |
| Rabbit Anti Mouse IgG (STAR8...)        | <a href="#">DyLight@800</a>  |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>  |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>  |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>   |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@680</a> ,<br><a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a> |

### Recommended Negative Controls

#### [MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
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