

Peninsula Laboratories, LLC

A Member of the Bachem Group

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Monoclonal Antibody to Human CD143 Angiotensin Converting Enzyme ACE, Peptidyl Dipeptidase A

Angiotensin converting enzyme is an unspecific endopeptidase which regulates blood pressure by generation of angiotensin II and degradation of bradykinin.

Product Number: T-1129
Clone: CG2

Host species, isotype: Mouse IgG1

Quantity: 200μg

Format: Affinity purified, lyophilized

Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer

and 0.1% Kathon as a preservative.

Stability: Original vial: 1 year at 4° - 8°C

Stock solution or aliquots thereof: 1 year at -20°C. Avoid

repeated thawing and freezing.

Applications: Tested for immunohistochemistry (IHC).

Approximate working dilution for IHC:

Frozen sections: does not work on routinely processed frozen

sections

Paraffin sections: 8µg/ml (1:50); microwave pretreatment for

antigen retrieval is recommended.

Optimal dilutions should be determined by the end user.

Suggested positive control: Human lung.

Immunogen: Purified ACE from human lung and kidney.

Antigen, epitope: The antigen is CD143, the epitope is apparently localized in the

N-terminal portion of the protein.



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Antigen distribution: Tissue sections: Topographically the degree of expression

correlates with the proportion of smooth muscle cells and elastic fibres of the vessel wall. ACE is predominantely expressed by small muscular arteries and by arterioles, whereas small and large veins do not usually express ACE. However, no ACE could be detected in the endothelial cells of kidney. Constitutively ACE is expressed on endothelial cells in different diseases like hypertension, myocardial infarction,

sarcoidosis, diabetes.

Specificity: Human: denatured ACE.

Other species: not tested.

Selected references

Danilov, S.M. et al.: Structure-Function Analysis of Angiotensin I-converting Enzyme Using Monoclonal Antibodies J.Biol.Chem. **269**(43): 26806-26814 (1994)

Franke, F.E. et al.: Angiotensin-I-Converting Enzyme in the Human Body (Abstract) XV European Congress of Pathology, 3-8 September 1995, Copenhagen-Denmark

Metzger, R. et al.: Lack of Angiotensin-Converting Enzyme (ACE) in Endothelial Cells of the Human Kidney. XV European Congress of Pathology, 3-8 September 1995, Copenhagen-Denmark).

For in vitro research only. Caution: this product contains Kathon, a poisonous and hazardous substance.