

Product datasheet for **BM4055**

Angiotensin Converting Enzyme 1 (ACE) Mouse Monoclonal Antibody [Clone ID: CG2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	CG2
Applications:	IHC
Recommended Dilution:	Suitable for Immunohistochemistry on Paraffin sections: 8 µg/ml (1:50); microwave pretreatment for antigen retrieval is recommended. Suggested positive control: Human lung.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified ACE from human lung and kidney.
Specificity:	Angiotensin converting Enzyme (ACE), denatured. The epitope recognized is localized on the NH ₂ -terminal side of the molecule. Topographically the degree of expression correlates with the proportion of smooth muscle cells and elastic fibres of the vessel wall. ACE is predominantly 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.
Formulation:	PBS, pH 7.2 containig 10 mg/ml bovine serum albumin (BSA) as a stabilizer and 0.1% Kathon as a preservative. State: Purified State: Lyophilized purified Ig fraction
Reconstitution Method:	Restore with 0.5 ml distilled water.
Concentration:	0.4 mg/ml
Purification:	Protein A chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. Do not freeze working dilutions Avoid repeated freezing and thawing.



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Stability:	Shelf life: One year from despatch.
Gene Name:	angiotensin I converting enzyme
Database Link:	Entrez Gene 1636 Human P12821
Background:	ACE converts angiotensin I to angiotensin II by release of the terminal His-Leu, this results in an increase of the vasoconstrictor activity of angiotensin. Also able to inactivate bradykinin, a potent vasodilator. ACE exists in two forms, a 170KD somatic form and a 90KD 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.
Synonyms:	DCP, DCP1, Angiotensin-converting enzyme
Note:	Protocol: Protocol with formalin-fixed, paraffin-embedded sections: The whole procedure is performed at room temperature <ol style="list-style-type: none">1. Deparaffinize and rehydrate tissue section2. Place slide in a cuvette with 250ml 0.01M citrate buffer, pH 6.03. Heat slide in a microwave oven for 2 x 7min. at 700Watt4. Leave slide in the buffer for 20min for cooling5. Wash in distilled water6. Block endogenous peroxidase7. Wash in PBS8. Block with 10% normal goat serum in PBS for 30min. in a humid chamber9. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber10. Wash in PBS11. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber12. Wash in PBS13. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.14. Wash in PBS15. Counterstain with Mayer's hemalum For further information and details see technical information