

Product Information

Anti-Adrenomedullin (N-terminal)

produced in rabbit, IgG fraction of antiserum

Catalog Number **SAB4200492**

Product Description

Anti-Adrenomedullin (N-terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to a sequence at the N-terminus of human adrenomedullin (ADM) (GeneID 133), conjugated to KLH. The corresponding sequence has significant homology (75% sequence identity) in rat and mouse ADM. Whole antiserum is purified using protein A immobilized on agarose to provide the IgG fraction of antiserum.

Anti-Adrenomedullin (N-terminal) specifically recognizes human ADM. The antibody can be used in several immunochemical techniques including immunohistochemistry and ELISA. Detection of ADM staining by immunohistochemistry is specifically inhibited by the ADM immunizing peptide.

Adrenomedullin (ADM, AM), is a potent hypotensive peptide originally isolated from human pheochromocytoma. In addition to its vasodilator effect ADM also exerts a wide range of biological actions including diuretic, cardiogenic effects, and is involved in the regulation of hormone release, inflammation, oxidative stress as well as the proliferation, migration and differentiation of various cell types.¹⁻⁴ ADM is thought to play a significant role in angiogenesis, and in pathological conditions including cardiovascular disease, ischemia and carcinogenesis.³⁻⁵ ADM is broadly distributed in many tissues during development and in adulthood. It is most highly expressed in endothelial cells and vascular smooth muscle cells and is localized in highly vascularized tissues including kidney, intestine, stomach, brain, lung, heart and placenta.⁶⁻⁷ ADM and proadrenomedullin N-terminal 20 peptide (PAMP) are derived from the same precursor proadrenomedullin by proteolytic processing and although both share similar hypotensive activities they act via different mechanisms. ADM exerts its effects via G-protein coupled calcitonin-like receptors (CRLR) complexed with either receptor activity-modifying protein-2 (RAMP2) or RAMP3.^{4,5}

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunohistochemistry: a working dilution of 1:500-1:1,000 is recommended using formalin-fixed, paraffin-embedded human small intestine.

ELISA: a working dilution of 1:10,000-1:20,000 is recommended using human adrenomedullin.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

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