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Product Information

Anti-MR-Pro ADM (Internal) antibody produced in rabbit affinity isolated antibody

Catalog Number SAB4200667

Product Description

Anti-MR-Pro ADM (Mid-Regional pro-Adrenomedullin) (Internal) is produced in rabbit using as immunogen a synthetic peptide corresponding to the internal region of human Adrenomedullin (ADM) (GeneID: 133), conjugated to KLH. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-MR-Pro ADM (Internal) recognizes human MR-Pro ADM. The antibody may be used in various immunochemical techniques including immunoblotting (~5 kDa) and immunohistochemistry. Detection of the MR-Pro ADM band by immunoblotting is specifically inhibited by the immunizing peptide.

The precursor peptide of Adrenomedullin (ADM),

prepro-ADM, is processed to the circulating form of ADM. During this processing, other peptides are also being generated; PAMP (proadrenomedullin N-terminal 20 peptide) with suggested hypotensive effect and MRpro ADM (Mid-Regional pro-Adrenomedullin) which consists of 47 amino acid-propeptide.¹ MR-pro-ADM has been suggested as a biomarker for plasma concentrations of Adrenomedullin as it is stoichiometrically generated and relatively stable in the plasma. Indeed, increased levels of MR-proADM were associated with an increased risk of mortality and morbidity in patients with heart failure, independent of natriuretic peptides, MR-proADM outperforms all other established markers in the identification of patients at highest risk of death, particularly death within 30 days. In dialysis patients MR-proADM and MR-proANP were shown to be associated with mortality in general and particularly with cardiovascular related mortality, with the highest risk when both parameters were elevated.2-5

Reagent

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

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the 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 is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.25-0.5 µg /mL is recommended using human recombinant peptide of MR-Pro ADM (amino acid 45-92).

Immunohistochemistry: a working dilution of 20 μg /mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded human pancreas or placenta sections.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References

- Morgenethaler, N.L., et al., Clin. Chem., 51, 1823-1829 (2005).
- Minamino, N., et al., Clin. Hemorheol. Microcirc., 23, 95-102 (2000).
- 3. Artunc, F., et al., PLoS One, 9, e86148 (2014).
- 4. Gouya, G., et al., PLoS One., 6, e17803 (2011).
- Potocki, M., et al., Curr Heart Fail Rep., 9, 244-251 (2012).

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