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Product Information

Anti-MR-Pro ADM antibody, Mouse monoclonal
clone MR2.1, hybridoma cell culture supernatant

Product Number **SAB4200700**

Product Description

Anti-MR-Pro ADM antibody, Mouse monoclonal (Mid-Regional pro-Adrenomedullin) (mouse IgG2a isotype) is derived from the hybridoma MR2.1 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to the internal region of human Adrenomedullin (ADM) (GeneID: 133), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Anti-MR-Pro ADM antibody, Mouse monoclonal 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 MR-pro 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-pro ADM were associated with an increased risk of mortality and morbidity in patients with heart failure, independent of natriuretic peptides. MR-pro ADM outperforms all other established markers in the identification of patients at highest risk of death, particularly death within 30 days. In dialysis patients MR-pro ADM and MR-pro ANP 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 1-2 µg/mL is recommended using human recombinant peptide of MR-Pro ADM (amino acid 45-92).

Immunohistochemistry: a working concentration of 2.5-5 µg/mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded human Pancreas sections and Biotin/ExtrAvidin®-Peroxidase staining system.

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

References

1. Minamino, N., et al., *Clin. Hemorheol. Microcirc.*, **23**, 95-102 (2000).
2. Artunc F., et al., *PLoS One*, **9**, e86148 (2014).
3. Gouya G., et al., *PLoS One.*, **6**, e17803 (2011).

4. Potocki M., et al., *Curr Heart Fail Rep.*, **9**, 244-251 (2012).

5. Peacock WF., *Clin Chem Lab Med*., **52**, 1433-35 (2014).

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