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Product Information

Anti-MR-Pro ADM antibody, Mouse monoclonal

clone 2E12E6, purified from hybridoma cell culture

Catalog Number SAB4200698

Product Description

Monoclonal Anti-MR-Pro ADM (Mid-Regional pro-Adrenomedullin) (mouse IgG1 isotype) is derived from the hybridoma 2E12E6 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with human recombinant protein (GeneID: 133). 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 recognizes human MR-Pro ADM. The antibody may be used in various immunochemical techniques including Immunoblotting (~5 kDa) and Indirect ELISA.

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. Upregultaed levels of MR-pro ADM were associated with an increased risk of mortality and morbidity in patients with heart failure, independent of natriuretic peptides. Moreover, MR-pro ADM outperforms all other established markers in the identification of patients at highest risk of death, particularly death within 30 days. In incident dialysis patients MR-pro ADM and MR-pro ANP were shown to be associated with all-cause and 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.

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

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

<u>Indirect ELISA:</u> a working concentration of 30-60 ng/mL is recommended using human recombinant peptide of MR-Pro ADM (amino acid 45-92) for coating.

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).
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- 3. Gouya G., et al., PLoS One., 6, e17803 (2011).
- 4. Potocki M., et al., *Curr Heart Fail Rep.*, **9**, 244-51 (2012).
- 5. Peacock WF., *Clin Chem Lab Med.*, **52**, 1433-35 (2014).

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