SANTA CRUZ BIOTECHNOLOGY, INC.

ADM Receptor (N-20): sc-16497

BACKGROUND

Adrenomedullin (ADM) is a hypotensive peptide that belongs to a peptide superfamily, which includes the calcitonin gene-related peptide (CGRP) and amylin. ADM was originally identified in the adrenal medulla, where it is highly expressed. It is also produced by most contractile cells and is up-regulated during sepsis and ischemia. Three distinct receptors have the ability to bind ADM and are designated ADM receptor (also designated L1), RDC-1 and the calcitonin receptor-like receptor (CRLR). The CRLR associates with receptor activity-modifying proteins (RAMPs), which determine the specificity of CRLR binding. Co-expression with RAMP1 results in CRLR binding to CGRP, whereas association with RAMP2 or 3 results in ADM binding. The ADM receptor, a seven transmembrane G protein-coupled receptor, specifically binds ADM and is highly expressed in heart, brain, skeletal muscle, the immune system, adrenal gland and liver. The ADM receptor mediates the signals produced by ADM through G proteins, which activate adenylate cyclase.

REFERENCES

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3. Renshaw, D., et al. 2000. Adrenomedullin receptor is found exclusively in noradrenaline-secreting cells of the rat adrenal medulla. J. Neurochem. 74: 1766-1772.
4. Ladoux, A. and Frelin, C. 2000. Coordinated Up-regulation by hypoxia of adrenomedullin and one of its putative receptors (RDC-1) in cells of the rat blood-brain barrier. J. Biol. Chem. 275: 39914-39919.
5. Hofbauer, K.H., et al. 2000. Tissue hypoxygenation activates the adrenomedullin system *in vivo*. Am. J. Physiol. Regul. Integr. Comp. Physiol. 278: 513-519.
6. Martinez, A., et al. 2000. Co-expression of receptors for adrenomedullin, calcitonin gene-related peptide, and amylin in pancreatic beta-cells. Endocrinology 141: 406-411.
7. Gorbig, M.N., et al. 2001. Human hepatic stellate cells secrete adrenomedullin: potential autocrine factor in the regulation of cell contractility. J. Hepatol. 34: 222-229.

SOURCE

ADM Receptor (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ADM Receptor of human origin.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-16497 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADM Receptor (N-20) is recommended for detection of ADM receptor of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.