SANTA CRUZ BIOTECHNOLOGY, INC.

ADM (F-20): sc-16495

BACKGROUND

Adrenomedullin (ADM), a vasodilator produced by most contractile cells, is characterized by persistent hypotensive activity. ADM is involved in the regulation of fluid and electrolyte homeostasis and in the maintenance of cardiovascular functioning. In hypertensive patients, the level of ADM in plasma is up-regulated. Natriuresis is a common systemic manifestation of aneurysmal subarachnoid hemorrhage. ADM has strong natriuretic actions. ADM-induced natriuresis is caused by an increase in glomerular filtration rate and a decrease in distal tubular sodium reabsorption. ADM is present both in the periphery and brain, and can exert central effects such as decreasing food ingestion.

REFERENCES

1. Gorbig, M.N., Gines, P., Bataller, R., Nicolas, J.M., Garcia-Ramallo, E., Cejudo, P., Sancho-Bru, P., Jimenez, W., Arroyo, V. and Rodes, J. 2001. Human hepatic stellate cells secrete adrenomedullin: potential autocrine factor in the regulation of cell contractility. J. Hepatol. 34: 222-229.
2. Kastin, A.J., Akerstrom, V., Hackler, L. and Pan, W. 2001. Adrenomedullin and the blood-brain barrier. Horm. Metab. Res. 33: 19-25.
3. Nakazawa, I., Nakajima, T., Harada, H., Ishigami, T., Umemura, S. and Emi, M. 2001. Human calcitonin receptor-like receptor for adrenomedullin: genomic structure, eight single-nucleotide polymorphisms, and haplotype analysis. J. Hum. Genet. 46: 132-136.
4. Wijdicks, E.F., Heublein, D.M. and Burnett, J.C. Jr. 2001. Increase and uncoupling of adrenomedullin from the natriuretic peptide system in aneurysmal subarachnoid hemorrhage. J. Neurosurg. 94: 252-256.
5. Jougasaki, M., Heublein, D.M., Sandberg, S.M. and Burnett, J.C. Jr. 2001. Attenuated natriuretic response to adrenomedullin in experimental heart failure. J. Card. Fail. 7: 75-83.

CHROMOSOMAL LOCATION

Genetic locus: ADM (human) mapping to 11p15.4; Adm (mouse) mapping to 7 F1.

SOURCE

ADM (F-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ADM of human origin.

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-16495 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

ADM (F-20) is recommended for detection of ADM of mouse, rat and 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).

ADM (F-20) is also recommended for detection of ADM in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ADM siRNA (h): sc-39273, ADM siRNA (m): sc-39274, ADM shRNA Plasmid (h): sc-39273-SH, ADM shRNA Plasmid (m): sc-39274-SH, ADM shRNA (h) Lentiviral Particles: sc-39273-V and ADM shRNA (m) Lentiviral Particles: sc-39274-V.

Molecular Weight of ADM precursor: 22 kDa.

Molecular Weight of ADM active peptide: 6 kDa.

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.