SANTA CRUZ BIOTECHNOLOGY, INC.

ADM (HTA171/E8): sc-53153

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 upregulated. 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., et al. 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., et al. 2001. Adrenomedullin and the blood-brain barrier. Horm. Metab. Res. 33: 19-25.
3. Nakazawa, I., et al. 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., et al. 2001. Increase and uncoupling of adrenomedullin from the natriuretic peptide system in aneurysmal subarachnoid hemorrhage. J. Neurosurg. 94: 252-256.

CHROMOSOMAL LOCATION

Genetic locus: ADM (human) mapping to 11p15.4.

SOURCE

ADM (HTA171/E8) is a mouse monoclonal antibody raised against chemically synthesized full length adrenomedullin of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ADM (HTA171/E8) is recommended for detection of ADM of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

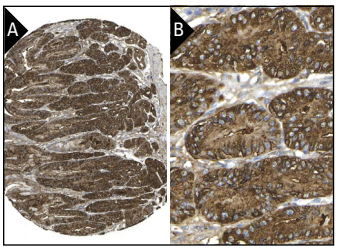
Molecular Weight of ADM precursor: 22 kDa.

Molecular Weight of ADM active peptide: 6 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 2) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ADM (HTA171/E8): sc-53153. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells at low (**A**) and high (**B**) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

1. Chen, Y., et al. 2017. Infiltrating mast cells promote renal cell carcinoma angiogenesis by modulating PI3K? AKT? GSK3β? AM signaling. Oncogene 36: 2879-2888.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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