SANTA CRUZ BIOTECHNOLOGY, INC.

ADM (027-01-1): sc-80462

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., 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.

SOURCE

ADM (027-01-1) is a mouse monoclonal antibody raised against a synthetic peptide corresponding to amino acids 1-52 of ADM of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

ADM (027-01-1) is recommended for detection of amino acids 22-52 of ADM of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] 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.

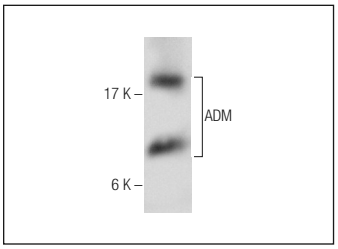
Molecular Weight of ADM active peptide: 6 kDa.

Positive Controls: SK-OV-3 whole cell lysate: sc-364229.

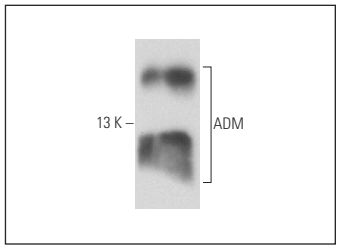
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ADM (027-01-1): sc-80462. Western blot analysis of ADM expression in SK-OV-3 whole cell lysate.



ADM (027-01-1): sc-80462. Western blot analysis of human recombinant ADM.

RESEARCH USE

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