

ADM2 (G-13): sc-86272

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. ADM2 (adrenomedullin-2), also known as AM2, IMDS or IMDL, is a 148 amino acid secreted protein that belongs to the adrenomedullin family of calcitonin-related peptide hormones and is expressed in the esophagus, stomach, jejunum, ileum, ileocecum, ascending colon, transverse colon, descending colon and rectum. ADM2 activates the cAMP-dependent pathway and may play a role in regulating gastrointestinal and cardiovascular bioactivities.

REFERENCES

1. Roh, J., et al. 2004. Intermedin is a Calcitonin/Calcitonin gene-related peptide family peptide acting through the Calcitonin receptor-like receptor/receptor activity-modifying protein receptor complexes. *J. Biol. Chem.* 279: 7264-7274.
2. Pan, C.S., et al. 2005. Cardiovascular effects of newly discovered peptide intermedin/adrenomedullin 2. *Peptides* 26: 1640-1646.
3. Takahashi, K., et al. 2006. Immunocytochemical localization of adrenomedullin 2/intermedin-like immunoreactivity in human hypothalamus, heart and kidney. *Peptides* 27: 1383-1389.
4. Chauhan, M., et al. 2007. Adrenomedullin-2, a novel Calcitonin/Calcitonin-gene-related peptide family peptide, relaxes rat mesenteric artery: influence of pregnancy. *Endocrinology* 148: 1727-1735.
5. Kindt, F., et al. 2007. Intermedin: a skin peptide that is downregulated in atopic dermatitis. *J. Invest. Dermatol.* 127: 605-613.
6. Morimoto, R., et al. 2007. Expression of adrenomedullin 2/intermedin in human brain, heart, and kidney. *Peptides* 28: 1095-1103.

CHROMOSOMAL LOCATION

Genetic locus: ADM2 (human) mapping to 22q13.33; Adm2 (mouse) mapping to 15 E3.

SOURCE

ADM2 (G-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ADM2 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86272 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ADM2 (G-13) is recommended for detection of ADM2 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), 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).

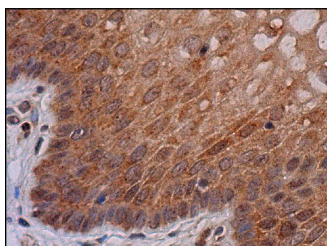
Suitable for use as control antibody for ADM2 siRNA (h): sc-72452, ADM2 siRNA (m): sc-140883, ADM2 shRNA Plasmid (h): sc-72452-SH, ADM2 shRNA Plasmid (m): sc-140883-SH, ADM2 shRNA (h) Lentiviral Particles: sc-72452-V and ADM2 shRNA (m) Lentiviral Particles: sc-140883-V.

Molecular Weight of ADM2: 16 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



ADM2 (G-13): sc-86272. Immunoperoxidase staining of formalin fixed, paraffin-embedded human vagina tissue showing cytoplasmic staining of squamous epithelial cells.

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 or our catalog for detailed protocols and support products.