

ADM Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5006C

Specification

ADM Antibody (Center) - Product Information

Application WB, FC, E **Primary Accession** P35318 Other Accession 062827 Reactivity Human Predicted **Bovine** Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 69-96

ADM Antibody (Center) - Additional Information

Gene ID 133

Other Names

ADM, Adrenomedullin, AM, Proadrenomedullin N-20 terminal peptide, ProAM N-terminal 20 peptide, PAMP, ProAM-N20, ADM, AM

Target/Specificity

This ADM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 69-96 amino acids of human ADM.

Dilution

WB~~1:2000

FC~~1:25

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ADM Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ADM Antibody (Center) - Protein Information

Name ADM (HGNC:259)



Synonyms AM

Function Adrenomedullin/ADM and proadrenomedullin N-20 terminal peptide/PAMP are peptide hormones that act as potent hypotensive and vasodilatator agents (PubMed:8387282, PubMed:9620797). Numerous actions have been reported most related to the physiologic control of fluid and electrolyte homeostasis. In the kidney, ADM is diuretic and natriuretic, and both ADM and PAMP inhibit aldosterone secretion by direct adrenal actions. In pituitary gland, both peptides at physiologically relevant doses inhibit basal ACTH secretion. Both peptides appear to act in brain and pituitary gland to facilitate the loss of plasma volume, actions which complement their hypotensive effects in blood vessels.

Cellular Location

Secreted.

Tissue Location

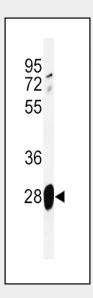
Highest levels found in pheochromocytoma and adrenal medulla. Also found in lung, ventricle and kidney tissues

ADM Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

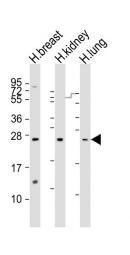
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ADM Antibody (Center) - Images

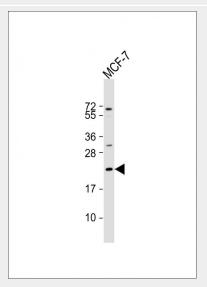


Western blot analysis of ADM Antibody (Center) (Cat. #AP5006c) in mouse lung tissue lysates (35ug/lane).ADM (arrow) was detected using the purified Pab.



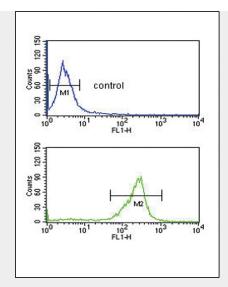


All lanes: Anti-ADM Antibody (Center) at 1:1000-1:2000 dilution Lane 1: human breast lysate Lane 2: human kidney lysate Lane 3: human lung lysate Lysates/proteins at $20~\mu g$ per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 21~kDa Blocking/Dilution buffer: 5% NFDM/TBST.

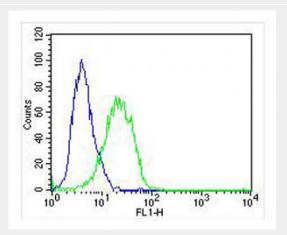


Anti-ADM Antibody (Center) at 1:2000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 20 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





ADM Antibody (Center) (Cat. #AP5006c) flow cytometric analysis of MDA-MB435 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

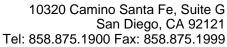


Overlay histogram showing A549 cells stained with AP5006C (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP5006C, 1:25 dilution) for 60 min at 37°C. The secondary Goat-Anti-Rabbit 488 antibody used was IgG, DyLight® Conjugated Highly Cross-Adsorbed(OH191631) at 1/400 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit $IgG (1\mu g/1x10^6 cells)$ used under the same conditions. Acquisition of >10, 000 events was performed.

ADM Antibody (Center) - Background

ADM, a hypotensive peptide found in human pheochromocytoma, consists of 52 amino acids, has 1 intramolecular disulfide bond, and shows a slight homology with the calcitonin gene-related peptide. It may function as a hormone in circulation control because it is found in blood in a considerable concentration. The precursor, called preproadrenomedullin, is 185 amino acids long. By RNA-blot analysis, human adrenomedullin mRNA was found to be highly expressed in several tissues. Genomic ADM DNA consists of 4 exons and 3 introns, with the 5-prime flanking region containing TATA, CAAT, and GC boxes.

ADM Antibody (Center) - References





Kim, S.M., et al. FEBS Lett. 584(1):213-218(2010) Oie, E., et al. Basic Res. Cardiol. 105(1):89-98(2010) Nomura, I., et al. Regul. Pept. 158 (1-3), 127-131 (2009)