

Adrenomedullin (ADM) Active Protein | ADM active protein

Active Adrenomedullin (ADM)

CATALOG # AAA161717	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Adrenomedullin (ADM); Active Adrenomedullin (ADM); Adrenomedullin; AM; PAMP; Proadrenomedullin N-20 terminal peptide; ProAM N-terminal 20 peptide4; ADM active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 90% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Pro24~Ala1 71
Applicable Applications for ADM active protein	Activity Assay, Cell Culture
Species	Mouse
Expression System	Prokaryotic expression
Tag	N-terminal His Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	10.1
Research Area	Endocrinology, Hormone metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

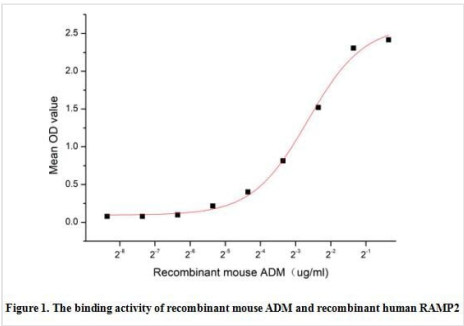


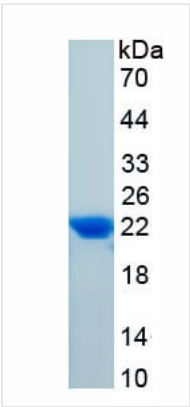
Figure 1. The binding activity of recombinant mouse ADM and recombinant human RAMP2

Bioactivity

Adrenomedullin (ADM) is a peptide hormone first discovered in 1993 in pheochromocytoma. Although AM is highly expressed in the adrenal glands, heart, lungs, and kidneys, vascular endothelium and smooth muscle are thought to be the main source of plasma AM. It is a 52 aa peptide with several functions, including vasodilation, regulation of hormone secretion, promotion of angiogenesis, and antimicrobial activity. The antimicrobial activity is antibacterial, as the peptide has been shown to kill *E. coli* and *S. aureus* at low concentration. Receptor activity-modifying protein 2 can transports the calcitonin gene-related peptide type 1 receptor (CALCRL) to the plasma membrane. Acts as a receptor for adrenomedullin (AM) together with CALCRL. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse ADM and recombinant human RAMP2. Briefly, ADM was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to RAMP2-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-ADM pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37 degree C, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50 uL stop solution to the wells and read at 450/630nm immediately. The binding activity of recombinant mouse ADM and recombinant human RAMP2 was shown in Figure 1, the EC50 for this effect is 0.16 ug/mL.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

Product Categories/Family for ADM active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6752988
NCBI GeneID	11535
NCBI Accession #	NP_033757.1
NCBI GenBank Nucleotide #	NM_009627.1
UniProt Accession #	P97297; P97453; Q6GTK2
Molecular Weight	20,750 Da
NCBI Official Full Name	ADM
NCBI Official Synonym Full Names	adrenomedullin
NCBI Official Symbol	Adm
NCBI Official Synonym Symbols	AM
NCBI Protein Information	ADM
UniProt Protein Name	ADM
UniProt Gene Name	Adm
UniProt Synonym Gene Names	AM; PAMP; ProAM-N20

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/e-coli-active-protein/adrenomedullin-adm/161717>