

Apolipoprotein M (APOM) Active Protein | APOM active protein

Active Apolipoprotein M (APOM)

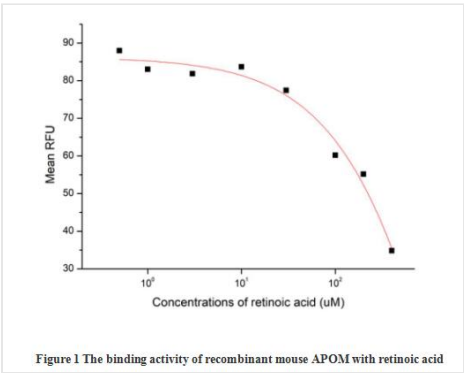
CATALOG # AAA161884	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Apolipoprotein M (APOM); Active Apolipoprotein M (APOM); Apolipoprotein M; Apo-M; G3a; NG20; Protein G3a4; APOM active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Met20~Lys1 90
Applicable Applications for APOM 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	5.9
Research Area	Metabolic pathway, Cardiovascular biology, Hepatology, Nutrition metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

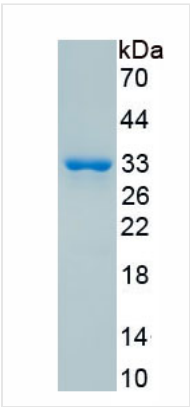


Bioactivity

Apolipoprotein M (APOM) is an approximately 25 kDa variably glycosylated protein that adopts a beta-barrel structure characteristic of lipocalin family proteins. It functions as a component of lipoprotein particles which play essential roles in fatty acid and cholesterol transport and metabolism. Alternative splicing generates a short isoform that lacks the N-terminal 72 amino acids. APOM is produced primarily by hepatocytes but also by renal tubule epithelial cells. The signal peptide is not cleaved and is required for APOM association with lipoprotein particles as well as Megalin mediated reabsorption by the kidney. The activity of recombinant mouse APOM was measured by its ability to bind all-trans retinoic acid. The binding of retinoic acid results in the quenching of Trp fluorescence in APOM. APOM was diluted to 50 ug/ml in 50 mM Tris, 10 mM CaCl₂, 150 mM NaCl, pH 7.5 (assay buffer) and the retinoic acid was diluted to 400, 200, 100, 30, 10, 3, 1 and 0.5 uM in 95% ethanol. Mixing 112.5 uL of 50 ug/mL rmAPOM and 12.5 uL of retinoic acid serial dilutions in microtubes and a blank containing 112.5 uL of 50 ug/mL rmAPOM and 12.5 uL of 95% ethanol, then incubate at room temperature for 30 minutes. Loading 100 ul of the reaction mixtures and blank and read at excitation and emission wavelengths of 280 nm and 340 nm (top read), respectively, in endpoint mode. The result was shown in figure 1, the 50% binding concentration (BC50) is >300 uM.

SDS-PAGE

Figure. SDS-PAGE



ADDITIONAL INFORMATION

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

NCBI GI #	9055162
NCBI GeneID	55938
NCBI Accession #	NP_061286.1
NCBI GenBank Nucleotide #	NM_018816.1
UniProt Accession #	Q9Z1R3
Molecular Weight	21,273 Da
NCBI Official Full Name	apolipoprotein M
NCBI Official Synonym Full Names	apolipoprotein M
NCBI Official Symbol	Apom
NCBI Official Synonym Symbols	G3a; NG20; 1190010O19Rik
NCBI Protein Information	apolipoprotein M
UniProt Protein Name	Apolipoprotein M
UniProt Gene Name	Apom
UniProt Synonym Gene Names	Ng20; Apo-M; ApoM

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/apolipoprotein-m-apom/161884>