

Apolipoprotein A4 (APOA4) Active Protein | APOA4 active protein

Active Apolipoprotein A4 (APOA4)

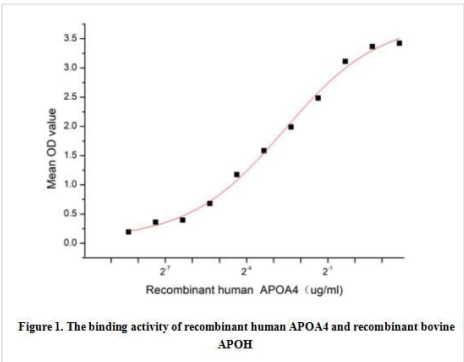
CATALOG # AAA161870	HOST E Coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Apolipoprotein A4 (APOA4); Active Apolipoprotein A4 (APOA4); Apolipoprotein A4; ApoA-IV; ApoAIV; Apo-A44; APOA4 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 80% by SDS-PAGE
Form/Format	Freeze-dried powder; PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence	Glu21~Asn2 35
Applicable Applications for APOA4 active protein	Activity Assay, Cell Culture
Species	Human
Expression System	Prokaryotic expression
Tag	N-terminal His and GST Tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method)
Isoelectric Point	5.2
Research Area	Metabolic pathway, Endocrinology, Cardiovascular biology, Hepatology, Gastroenterology, Nutrition metabolism
Preparation and Storage	Store at 2-8 degree C for one month, -80 degree C for 12 months

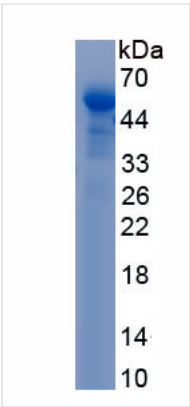


Bioactivity

Apolipoprotein A4 (APOA4) is a lipid-binding protein, which is primarily synthesized in the small intestine, packaged into chylomicrons, and secreted into intestinal lymph during fat absorption. In the circulation, apoA-IV is present on chylomicron remnants, high-density lipoproteins, and also in lipid-free form. ApoA-IV is involved in a myriad of physiological processes such as lipid absorption and metabolism, anti-atherosclerosis, platelet aggregation and thrombosis, glucose homeostasis and food intake. Besides, Apolipoprotein H (APOH) has been identified as an interactor of APOA4, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human APOA4 and recombinant bovine APOH. Briefly, APOA4 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to APOH-coated microtiter wells and incubated for 1h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-APOA4 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 450/630 nm immediately. The binding activity of recombinant human APOA4 and recombinant bovine APOH 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 APOA4 active protein	Active proteins
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NCBI AND UNIPROT INFORMATION

NCBI GI #	93163358
NCBI GeneID	337
UniProt Accession #	P06727; Q14CW8; Q6Q787; A8MSL6
Molecular Weight	45,399 Da
NCBI Official Full Name	Apolipoprotein A-IV
NCBI Official Synonym Full Names	apolipoprotein A-IV
NCBI Official Symbol	APOA4
NCBI Protein Information	apolipoprotein A-IV; apo-AIV; apoA-IV; apolipoprotein A4
UniProt Protein Name	Apolipoprotein A-IV
UniProt Gene Name	APOA4
UniProt Synonym Gene Names	Apo-AIV; ApoA-IV
UniProt Entry Name	APOA4_HUMAN

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.

