

Apolipoprotein C3 (APOC3) Active Protein | APOC3 active protein

Active Apolipoprotein C3 (APOC3)

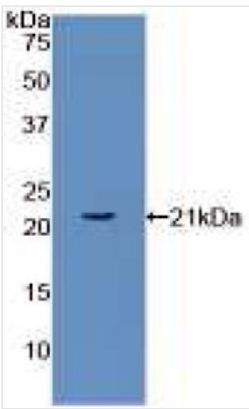
CATALOG # AAA149252	HOST E. coli	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

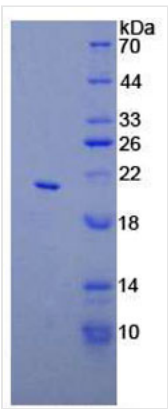
Apolipoprotein C3 (APOC3); Active Apolipoprotein C3 (APOC3); Apo-C3; APOCIII; APOC-III; APOC3 active protein

PRODUCT SPECIFICATIONS

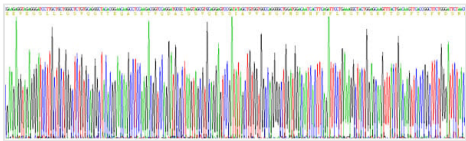
Host	E. coli
Purity/Purification	>95%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Applicable Applications for APOC3 active protein	Activity Assay, Cell Culture
Organism Species	Mus musculus (Mouse)
Source	Prokaryotic expression.
Residues	Glu21~Ser99
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	5.1
Phenomenon explanation	The possible reasons that the actual band size differs from the predicted are as follows: 1. Splice variants: Alternative splicing may create different sized proteins from the same gene. 2. Relative charge: The composition of amino acids may affects the charge of the protein. 3. Post-translational modification: Phosphorylation, glycosylation, methylation etc. 4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form. 5. Polymerization of the target protein: Dimerization, multimerization etc.
Usage	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



WB (Western Blot)
Western Blot Sample: Recombinant APOC3, Mouse; Antibody: Rabbit Anti-Mouse APOC3 Ab



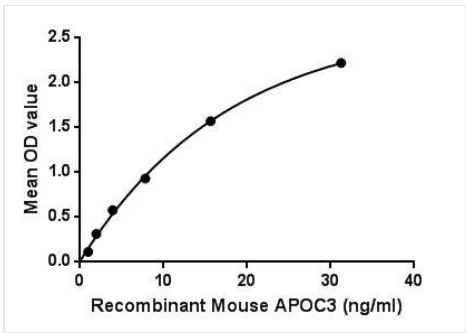
SDS_PAGE
Sample: Active recombinant APOC3, Mouse



Gene Sequencing
Gene Sequencing (extract)

EEVEGSLLLG SVQGYMEQAS KTVQDALSSV
QESDIAVVAR GWMDNHFRFL KGYWSKFTDK FTGFWDNPE DQPTPAIES

Gene Sequence



Activity
Figure. The binding activity of APOC3 with PCYOX1. Apolipoprotein C3 (APOC3) also known as apo-CIII is a component of very low density lipoprotein (VLDL). APOC3 inhibits lipoprotein lipase and hepatic lipase; it is thought to inhibit hepatic uptake of triglyceride-rich particles. An increase in apoC-III levels induces the development of hypertriglyceridemia. Some evidences suggest an intracellular role for Apo-CIII in promoting the assembly and secretion of triglyceride-rich VLDL particles from hepatic cells under lipid-rich conditions. Besides, Prenylcysteine Oxidase 1 (PCYOX1) has been identified as an interactor of APOC3, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse APOC3 and recombinant mouse PCYOX1. Briefly, APOC3 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100muL were then transferred to PCYOX1-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-APOC3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of APOC3 and PCYOX1 was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for APOC3 active protein	Metabolic pathway; Endocrinology; Cardiovascular biology; Hepatology; Nutrition metabolism
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NCBI AND UNIPROT INFORMATION

NCBI GI #	577019554
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NCBI GeneID	11814
NCBI Accession #	NP_001276685.1
NCBI GenBank Nucleotide #	NM_001289756.1
UniProt Accession #	P33622
Molecular Weight	Predicted Molecular Mass: 10.4kDa Accurate Molecular Mass: 21kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	apolipoprotein C-III isoform b
NCBI Official Synonym Full Names	apolipoprotein C-III
NCBI Official Symbol	Apoc3
NCBI Official Synonym Symbols	apo-CIII; apoC-III
NCBI Protein Information	apolipoprotein C-III
UniProt Protein Name	Apolipoprotein C-III
UniProt Gene Name	Apoc3
UniProt Synonym Gene Names	Apo-CIII; ApoC-III

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/e-coli-active-protein/apolipoprotein-c3-apoc3/149252>