

Apolipoprotein A5 Human HEK293

Product Data Sheet

Type: Recombinant

Source: HEK293

Species: Human

Other names: ApoA5, ApoA-V, Regeneration-associated protein 3, RAP3

Cat. No.:

RD172101100 (0.1 mg)

Description

Total 354 AA. MW: 40.1 kDa (calculated), C-Terminal Flag-tag (11 extra AA). UniProt entry Q6Q788.

Introduction to the Molecule

Apolipoprotein A5 (ApoA5) is fast gaining attention as a key regulator of serum triglyceride concentrations. An ApoA5 mouse knock-out model produced an approximately four fold increase in serum triglycerides, whereas a knock-in model human ApoA5 produced 50-70% lower concentrations of mouse serum triglycerides. In, additions, peroxisome proliferators-activated receptor-agonists, which are used clinically to lower serum triglyceride concentrations, cause increased ApoA5 mRNA expression. Despite these compelling molecular biology data, relatively little is known about ApoA5 protein in human serum. Recently, it was demonstrated that ApoA5 is the present in the human serum detected by polyclonal antibodies against both the HN2 and COOH termini, although at much lower concentration than other apolipoproteins.

Research topic

Lipoprotein metabolism

Amino Acid Sequence

RKGFWDYFSQ TSGDKGRVEQ IHQQKMAREP ATLKDSLEQD LNNMNKFLEK LRPLSGSEAP RLPQDPVGMR RQLQEELEEV
KARLQPYMAE AHELVGWNLE GLRQQLKPYT MDLMEQVALR VQELQEQLRV VGEDTKAQLL GGVDEAWALL QGLQSRVVHH
TGRFKELFHP YAESLVSGIG RHVQELHRSV APHAPASPAR LSRCVQVLSR KLTLKAKALH ARIQQNLDQL REELSRFAG
TGTEEGAGPD PQMLSEEVQR RLQAFRQDTY LQIAAFTRAI DQETEEVQQQ LAPPPP GHSA FAPEFQQTDS GKVLSKLQAR
LDDLWEDITH SLHDQGHSHL GDP **AAADYKD DDDK**

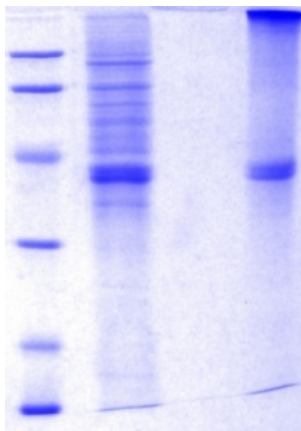
Source

HEK293

Purity

Purity as determined by densitometric image analysis > 70%

SDS-PAGE gel



12% SDS-PAGE separation of Human ApoA5

1. M.W. marker - 14, 21, 31, 45, 66, 97 kDa

2. reduced and boiled sample, 5µg/lane

3. non-reduced and non-boiled sample, 5µg/lane

Endotoxin

<1.0 EU/μg

Formulation

Filtered (0.4 μm) and lyophilized in 0.5 mg/mL in 20mM TRIS, 50mM NaCl, pH 7.5

Reconstitution

Add deionized water to prepare a working stock solution of 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -80°C. Lyophilized protein remains stable until the expiry date when stored at -80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

Quality Control Test

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

LAL TEST to determine quantity of the endotoxin.

Applications

Cell culture and/or animal studies, ELISA, Western blotting

Note

This product is intended for research use only.

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