Recombinant APOA1 protein (His tag)

Catalog Number	541997
Synonyms	Apo-AI; ApoA-I; Apolipoprotein A1; ProapoA-I; Apolipoprotein A-I(1-242)
Species	Human
Expression System	E. coli
Accession	P02647
Molecular Weight	Predictes a molecular mass of 21.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Amino Acid Sequence	MSKIKHHHHH HGGSEFWDNL EKETEGLRQE MSKDLEEVKA KVQPYLDDFQ KKWQEEMELY RQKVEPLRAE LQEGARQKLH ELQEKLSPLG EEMRDRARAH VDALRTHLAP YSDELRQRLA ARLEALKENG GARLAEYHAK ATEHLSTLSE KAKPALEDLR QGLLPVLESF KVSFLSALEE YTKKLNTQ
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 94-267 aa (P02647) were fused with N-terminal 6His tag.

Storage & Handling

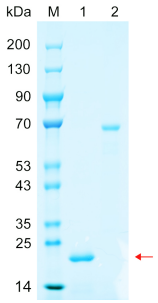
Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Introducing the recombinant Apolipoprotein A-I (Apo-AI) fragment (residues 94-267), a highly stable and soluble protein unit ideal for structural and biochemical studies. This fragment, derived from human Apo-AI, retains key functional relevance for investigating cholesterol transport mechanisms and related metabolic pathways. Apolipoprotein A-I (Apo-AI) is a secreted protein crucial for the reverse transport of cholesterol, facilitating efflux from tissues and acting as a cofactor for lecithin cholesterol acyltransferase (LCAT) to promote cholesterol excretion in the liver. It also plays a role in sperm motility activation as part of the SPAP complex. The full-length protein's localization to the secretory pathway underscores its systemic role in lipid metabolism and cardiovascular health.

Validation

SDS-PAGE



Recombinant APOA1 protein (His tag) SDS-PAGE
M: Marker; Lane 1: APOA1; Lane 2: BSA