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APOE
Recombinant Human Apolipoprotein E4

Catalog No.	CRA404A	**Quantity:**	100 µg
	CRA404B		500 µg
	CRA404C		1 mg

Alternate Names: Apolipoprotein E4, AD2, Apo-E, APOEA

Description: ApoE belongs to a group of proteins that bind reversibly with lipoprotein and play an important role in lipid metabolism. In addition to facilitating solublization of lipids, these proteins help to maintain the structural integrity of lipoproteins, serve as ligands for lipoprotein receptors, and regulate the activity of enzymes involved in lipid metabolism. Significant quantities of ApoE are produced in liver and brain and to some extent in almost every organ. ApoE is an important constituent of all plasma lipoproteins. It's interaction with specific ApoE receptor enables uptake of chylomicron remnants by liver cells, which is an essential step during normal lipid metabolism. It also binds with the LDL receptor (apo B/E). Defects in ApoE are a cause of hyperlipoproteinemia type III. ApoE exists in three major isoforms; E2, E3, and E4, which differ from one another by a single amino-acid substitution. Individuals heterozygous for the ApoE4 allele are at higher risk of late-onset Alzheimer's disease.

Gene ID: 348

UniProt ID: P02649 VAR_000652

Source: *E. coli*

Molecular Weight: 34.4 kDa

Formulation: Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 10 mM sodium phosphate, 0.5 mM DTT, pH 7.5

Purity: >90% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 5 EU/µg

Amino Acid Sequence: GPKVEQAVET EPEPELRQQT EWQSGQRWEL ALGRFWDYLR WVQTLSEQVQ EELLSSQVTQ ELRALMDETM KELKAYKSEL EEQLTPVAEE TRARLSKELQ AAQARLGADM EDVRGRLVQY RGEVQAMLGQ STEELRVRLA SHLRKLRKRL LRDADDLQKR LAVYQAGARE GAERGLSAIR ERLGPLVEQG RVRAATVGSL AGQPLQERAQ AWGERLRARM EEMGSRTRDR LDEVKEQVAE VRAKLEEQAQ QIRLQAEAFQ ARLKSWFEPL VEDMQRQWAG LVEKVQAAVG TSAAPVPSDN H

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipet the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for reconstitution.

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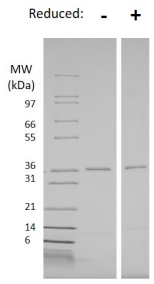
Storage & Stability: Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.
Avoid repeated freeze-thaw cycles.



Human Apo-E4 Gel
Figure: 1 ug in each lane (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Human Apo-E4 has a predicted MW of 35.5 kDa (including a His tag).

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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