

DATA SHEET

Product Name: Human Apolipoprotein E2, ApoE2, Recombinant

Catalog #: A-2015

Source: *E. coli*

Molecular Mass: 34.3 kDa

Protein Purity: >90% by SDS-PAGE and HPLC analyses
Endotoxin level is <0.1 ng/μg of Apo-D

Supplied As: Sterile filtered and lyophilized with no additives

Resuspension: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. The solution can then be diluted into other aqueous buffers and store at 4°C for 1 week or -20°C for future use.

Storage: The lyophilized ApoE2 is best-stored desiccated below 0°C. Reconstituted ApoE2 should be stored at working aliquots at -20°C.

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 solubilization 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. Compared with E3 and E4, E2 exhibits the lowest receptor binding affinity. E2 allele carriers had significantly lower levels of total cholesterol, low-density lipoprotein cholesterol, and nonhigh-density lipoprotein cholesterol, as well as increased ApoE levels. Recombinant human ApoE2 is a 34.3 kDa protein containing 300 amino acid residues.

For research use only. Not for use in humans.