

# Recombinant Human ApoE4

**CATALOG #:** 4699-50 50 µg  
4699-500 500 µg

**LOT #:** \_\_\_\_\_

**SOURCE:** *E. coli*

**PURITY:** >90% by SDS-PAGE and HPLC analyses  
Endotoxin level is <0.1 ng per µg of ApoE4.

**MOL. WEIGHT:** 34.4 kDa

**FORM:** Sterile filtered and lyophilized without additives

## RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in dH<sub>2</sub>O 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 CONDITIONS:

The lyophilized human ApoE4 is best-stored desiccated below 0°C. Reconstituted ApoE4 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. Individuals heterozygous for the ApoE4 allele are at higher risk of late-onset Alzheimer's disease. Recombinant human ApoE4 is a 34.4 kDa protein containing 300 amino acid residues.

**NOTE:** For Research Use Only. Not to be used in humans.

## RELATED PRODUCTS:

### Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptotic Cell Isolation Kit

### Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

### Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

### Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

### Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

### Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay Kit
- Total Cholesterol Quantification Kit

### Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

### Growth Factors and Cytokines

Quality Antibodies for Apoptosis and Signal Transduction Molecules