For Research Use Only

Recombinant Human APOE protein (His Tag)

www.ptgcn.com

Catalog Number: Eg0448

Basic Information

Species: Human

Purity: >90 %, SDS-PAGE

Tag: His Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/ μ g protein, LAL method

Source:
HEK293-derived Human APOE protein Lys19-His317 (Accession# P02649) with a His tag at the C-terminus.

GeneID:
348

Accession:
P02649

Predicted Molecular Mass:
38 kDa

SDS-PAGE:
34-36 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

Apolipoprotein E (APOE) is a core component of plasma lipoproteins and is involved in a variety of biological processes, including plasma lipoprotein metabolism, intracellular cholesterol utilization, cell growth, immune regulation, and neuronal growth and repair.The ε 4 allele of the APOE gene is the strongest genetic risk factor for late-onset Alzheimer's disease (AD). Mouse APOE, like ApoE4, contains equivalents of Arg-112 and Glu-255 but lacks the critical Arg-61 equivalent. APOE has heparin-binding activity and binds to heparan sulfate proteoglycans on the cell surface, a property that facilitates cellular capture and receptor-mediated uptake of APOE-containing lipoproteins.

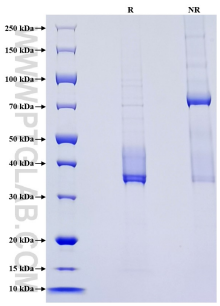
References

1. Teng E.,et al. (2015). Dement Geriatr Cogn Disord.39(3-4):154-66.
2. Raffai R.L.,et al. (2001). Proc Natl Acad Sci U S A.98(20):11587-11591.
3. Mooijaart SP,et al. (2006). PLoS Med.3(6):e176.
4. Maloney B,et al. (2007).J Neurochem.103(3):1237-1257.

Synonyms

APOE, Apo E, Apo-E, apoe4, apolipoprotein E

Selected Validation Data



Purity of Recombinant Human APOE was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.