

# Human APOE3/Apolipoprotein E Protein

Cat. No. APO-HM101

## Description

<b>Source</b>	Recombinant Human APOE3/Apolipoprotein E Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Lys19-His317.
<b>Accession</b>	P02649-1
<b>Molecular Weight</b>	The protein has a predicted MW of 35.3 kDa. Due to glycosylation, the protein migrates to 35-40 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

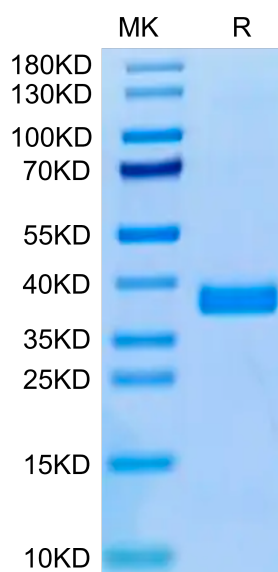
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Apolipoprotein E (apoE) is a lipid carrier in both the peripheral and the central nervous systems. Lipid-loaded apoE lipoprotein particles bind to several cell surface receptors to support membrane homeostasis and injury repair in the brain. Considering prevalence and relative risk magnitude, the  $\epsilon 4$  allele of the APOE gene is the strongest genetic risk factor for late-onset Alzheimer's disease (AD).

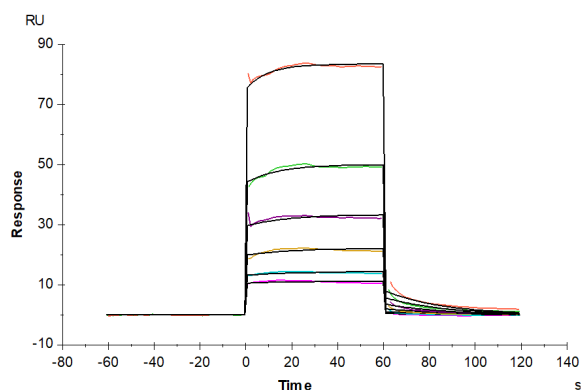
## Assay Data

### Bis-Tris PAGE



Human APOE3 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SPR Data



Human TREM2, hFc Tag captured on CM5 Chip via Protein A can bind Human APOE3, His Tag with an affinity constant of 1.21  $\mu\text{M}$  as determined in SPR assay (Biacore T200) (QC Test).