

Human APOE4/Apolipoprotein E Protein



Cat. No. APO-HM102

Description	
Source	Recombinant Human APOE4/Apolipoprotein E Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Lys19-His317.
Accession	AAB59397.1
Molecular Weight	The protein has a predicted MW of 34.3 kDa. Due to glycosylation, the protein migrates to 35-40 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE

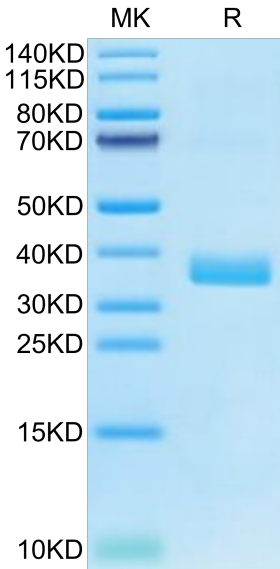
Formulation and Storage	
Formulation	Lyophilized from 0.22 µm filtered solution in PBS, 2mM DTT (pH 7.4) / PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-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 ε4 allele of the APOE gene is the strongest genetic risk factor for late-onset Alzheimer's disease (AD).

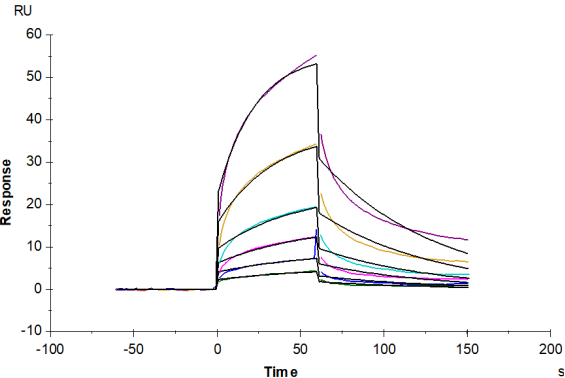
Assay Data

Bis-Tris PAGE



Human APOE4 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 APOE 4, His Tag with an affinity constant of 0.77 µM as determined in SPR assay (Biacore T200) (QC Test).