

Human APOE3/Apolipoprotein E Protein

Cat. No. APO-HM101

Description

Source	Recombinant Human APOE3/Apolipoprotein E Protein is expressed from HEK293 with His tag at the N-Terminus. It contains Lys19-His317.
Accession	P02649-1
Molecular Weight	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.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 90% as determined by HPLC

Formulation and Storage

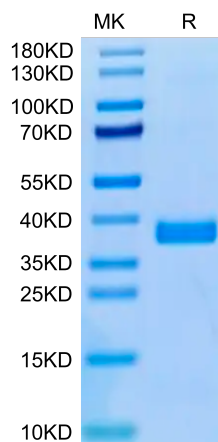
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
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 $\epsilon 4$ allele of the APOE gene is the strongest genetic risk factor for late-onset Alzheimer's disease (AD).

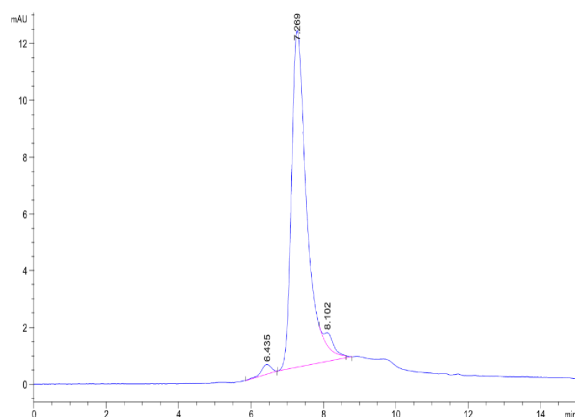
Assay Data

Bis-Tris PAGE



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

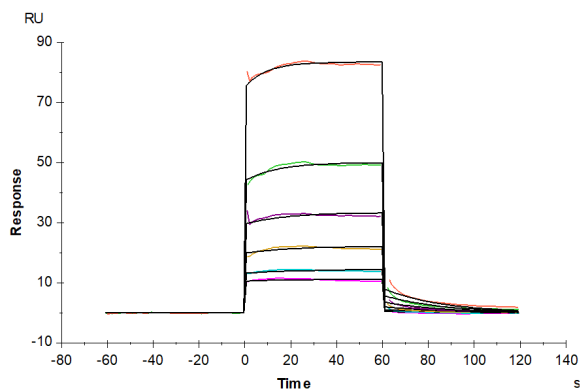
SEC-HPLC



The purity of Human APOE3 is greater than 90% as determined by SEC-HPLC.

Assay Data

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 μ M as determined in SPR assay (Biacore T200) (QC Test).