

Synonym

Apolipoprotein E, APOE, Apo-E

Source

Mouse Apolipoprotein E Protein, His Tag(APE-M52H5) is expressed from human 293 cells (HEK293). It contains AA Glu 19 - Gln 311 (Accession # [P08226](#)).

Predicted N-terminus: Glu 19

Molecular Characterization

APOE(Glu 19 - Gln 311) P08226	Poly-his
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This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 35.9 kDa. The protein migrates as 14 kDa and 35 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

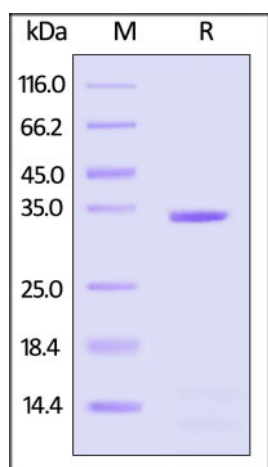
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

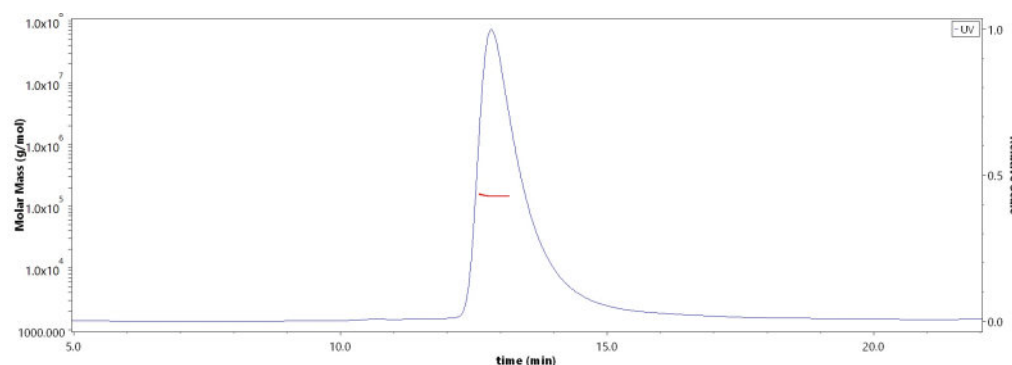
SDS-PAGE



Mouse Apolipoprotein E Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

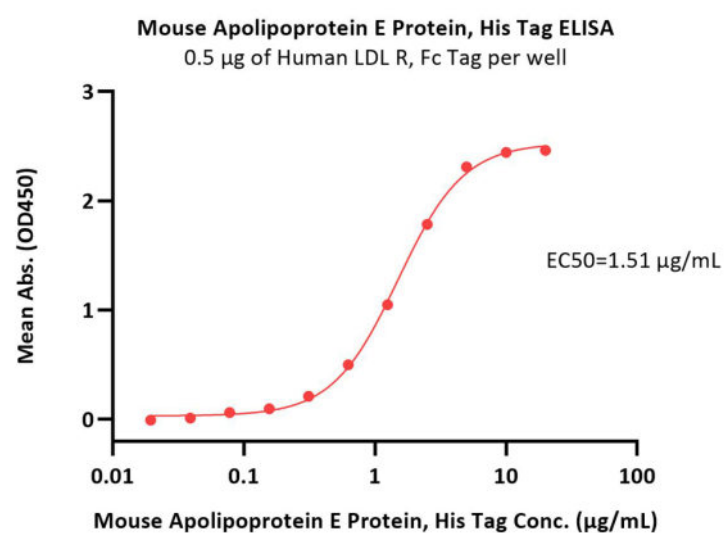
Bioactivity-ELISA

SEC-MALS



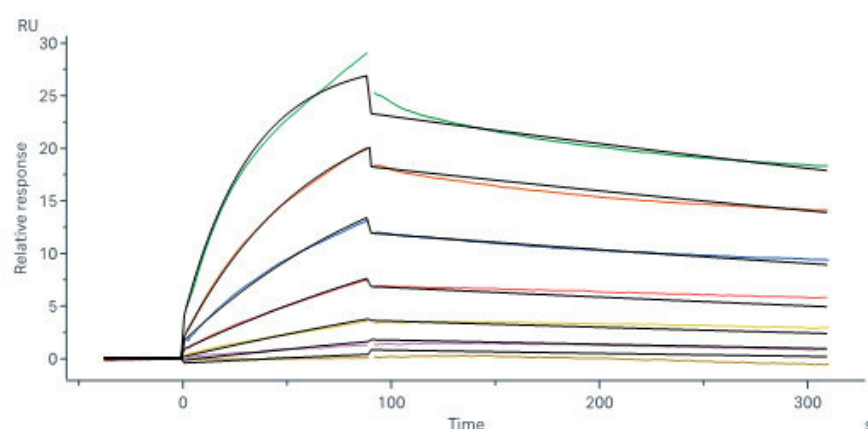
The purity of Mouse Apolipoprotein E Protein, His Tag (Cat. No. APE-M52H5) is more than 90% and the molecular weight of this protein is around 135-155 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human LDL R, Fc Tag (Cat. No. LDR-H5254) at 5 µg/mL (100 µL/well) can bind Mouse Apolipoprotein E Protein, His Tag (Cat. No. APE-M52H5) with a linear range of 0.02-2.5 µg/mL (Routinely tested).

Bioactivity-SPR



Mouse Apolipoprotein E Protein, His Tag (Cat. No. APE-M52H5) immobilized on CM5 Chip can bind Mouse LDL R, His Tag (Cat. No. LDR-M52H8) with an affinity constant of 73.4 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

APOE is an apolipoprotein, a protein associating with lipid particles, that mainly functions in lipoprotein-mediated lipid transport between organs via the plasma and interstitial fluids. APOE is a core component of plasma lipoproteins and is involved in their production, conversion and clearance. Apolipoproteins are amphipathic molecules that interact both with lipids of the lipoprotein particle core and the aqueous environment of the plasma. As such, APOE associates with chylomicrons, chylomicron remnants, very low density lipoproteins (VLDL) and intermediate density lipoproteins (IDL) but shows a preferential binding to high-density lipoproteins (HDL). It also binds a wide range of cellular receptors including the LDL receptor/LDLR, the LDL receptor-related proteins LRP1, LRP2 and LRP8 and the very low-density lipoprotein receptor/VLDLR that mediate the cellular uptake of the APOE-containing lipoprotein particles.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.