



## Recombinant Protein Technical Manual

**Recombinant Human Apolipoprotein A-I/ApoAI  
Protein (Fc Tag)(Active)**  
RPES3419

### Product Data:

**Product SKU:** RPES3419

**Size:** 50µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** CAA26097.1

### Protein Information:

**Molecular Mass:** 55 kDa

**AP Molecular Mass:** 55 kDa

**Tag:** C-Fc

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized Human ApoAI at 10 µg/mL (100 µl/well) can bind biotinylated human SCARB1, The EC50 of biotinylated human SCARB1 is 0.37 µg/mL.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** Apolipoprotein A-I; Apo-AI; ApoA-I; Apolipoprotein A1; APOA1

## Immunogen Information:

**Sequence:** Met 1-Gln 267

## Background:

Apolipoprotein A1 (APOA1) is a member of the apolipoprotein family whose members are proteins that bind with lipids and form lipoproteins to transport these oil-soluble lipids such as fat and cholesterol through the lymphatic and circulatory system. APOA1 is the main component of high density lipoprotein (HDL) in plasma and is involved in the esterification of cholesterol as a cofactor of lecithin-cholesterol acyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters, and thus plays a major role in cholesterol efflux from peripheral cells. As a major component of the HDL complex, APOA1 helps to clear cholesterol from arteries. APOA1 is also characterized as a prostacyclin stabilizing factor, and thus may have an anticlotting effect. Defects in the encoding gene may result in HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. Men carrying a mutation may develop premature coronary artery disease.