



# Recombinant Protein Technical Manual

## Recombinant Human Apolipoprotein A-I/ApoAI Protein RPES2825

### Product Data:

**Product SKU:** RPES2825

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P02647

### Protein Information:

**Molecular Mass:** 29.0 kDa

**AP Molecular Mass:** 27-29 kDa

**Tag:**

**Bio-activity:**

**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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

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

**Application:**

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

## Immunogen Information:

**Sequence:** Arg19-Gln267

## Background:

Apolipoprotein A1 (APOA1) is a secreted protein which belongs to the Apolipoprotein A1/A4/E family. APOA1 is the major protein component of high density lipoprotein (HDL) in plasma. APOA1 plays a critical role in various biological processes, such as Cholesterol metabolism, Lipid metabolism and transport, Steroid metabolism. APOA1 promotes cholesterol efflux from tissues to the liver and thus helps to clear cholesterol from arteries. Defects in this gene resulted in HDL deficiencies, including Tangier disease (TGD), systemic non-neuropathic amyloidosis, premature coronary artery disease, hepatosplenomegaly and progressive muscle wasting and weakness. In addition, ApoA-I is implicated in the anti-endotoxin function of HDL via interaction with lipopolysaccharide or endotoxin.