## Product Data:

**Product SKU:** RPES1371

**Size:** 100μg

**Species**: Mouse

**Expression host:** HEK293 Cells

**Uniprot:** Q00623

## Protein Information:

| | |
|---|---|
| **Molecular Mass:** | 30.2 kDa |
| **AP Molecular Mass:** | 27-31 kDa |
| **Tag:** | C-His |
| **Bio-activity:** | |
| **Purity:** | > 94 % as determined by SDS-PAGE |
| **Endotoxin:** | < 1.0 EU per μg of the protein 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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months. |
| **Shipping:** | This product is provided as lyophilized powder which is shipped with ice packs. |
| **Formulation:** | Lyophilized from sterile PBS, pH 7.4 |
| **Reconstitution:** | Please refer to the printed manual for detailed information. |
| **Application:** | |
| **Synonyms:** | 1-Sep;2-Sep;42248;42249;Alp;apo-AI;Apoa;apoA-I;Brp4;Ltw;Lvtw |

**Sequence:** Met1-Gln264

## Background:

Apolipoprotein A1 (APOA1) is a member of the apolipoprotein family whose members are proteins bind with lipids and form lipoproteins to translate these oil-soluble lipids such as fat and cholesterol through 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 play 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 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.