

## Recombinant Mouse Apoa1 Protein, C-hFc-tagged

## **Product Information**

Cat IMP-1830

Official Symbol Apoa1

Product Overview Recombinant mouse APOA1 (Q00623) (Met 1-Gln 264) was fused with the

Fc region of human IgG1 at the C-terminus.

**Description**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.

Expression System HEK293

**Species** Mouse

Tag C-hFc

Predicted N Terminal Trp 19

Form Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and

0.01% Tween80.

Molecular Mass The secreted recombinant mouse APOA1/Fc is a disulfide-linked

homodimer. The reduced monomer comprises 487 amino acids and has a calculated molecular mass of 55.8 kDa. As a result of glycosylation, the apparent molecular mass of rmAPOA1/Fc monomer is approximately 60

kDa in SDS-PAGE under reducing conditions.

Protein length Met1-Gln264

Endotoxin < 1.0 EU/μg of the protein as determined by the LAL method

Purity > 90 % as determined by SDS-PAGE

Storage Samples are stable for up to twelve months from date of receipt at -20 to

-80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is

recommended that the protein be aliquoted for optimal storage. Avoid

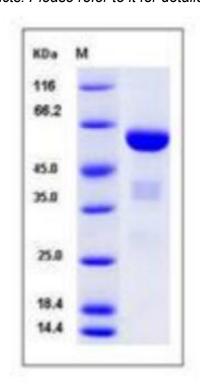


repeated freeze-thaw cycles.

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

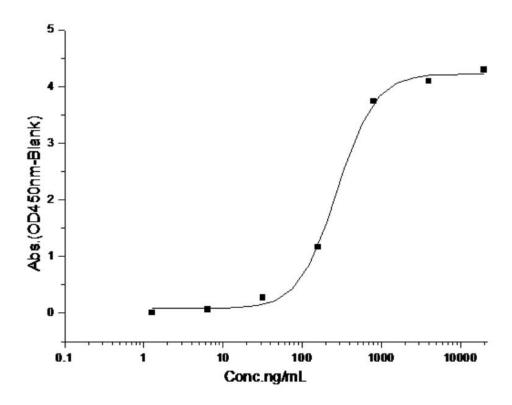
## Reconstitution

SDS-PAGE



## Bioactivity-ELISA 1





Measured by its binding ability in a functional ELISA. Immobilized mouse ApoAl at 10  $\mu$ g/mL (100  $\mu$ L/well) can bind biotinylated human SCARB1, The EC50 of biotinylated human SCARB1 is 0.27  $\mu$ g/mL.