



Recombinant Protein Technical Manual

**Recombinant Human Apolipoprotein H/ApoH
Protein (His Tag)(Active)**
RPES2720

Product Data:

Product SKU: RPES2720

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_000033.2

Protein Information:

Molecular Mass: 37.7 kDa

AP Molecular Mass: 53 kDa

Tag: C-His

Bio-activity: 1. Measured by its binding ability in a functional ELISA.2. Immobilized human APOH-his at 2 µg/mL (100 µl/well) can bind biotinylated human LDLR-his, The EC50 of biotinylated human LDLR-his is 0.35 µg/mL.3. Immobilized human APOH-his at 2 µg/mL (100 µl/well) can bind biotinylated mouse LDLR-his, The EC50 of biotinylated mouse LDLR-his is 26 ng/mL.

Purity: > 96 % 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 PBS, pH 7.4

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

Application: Functional ELISA

Synonyms: Beta-2-Glycoprotein 1; APC inhibitor; Activated Protein C-Binding Protein; Anticardiolipin Cofactor; Apolipoprotein H; Apo-H; Beta-2-Glycoprotein I; B2GPIBeta(2)GPI; APOH; B2G1;B2GP1;BG

Immunogen Information:

Sequence: Met 1-Cys 345

Background:

Apolipoprotein H (APOH), also known as Beta-2-glycoprotein 1, Activated protein C-binding protein, B2GPI, and B2G1, is a glycoprotein synthesized by liver cells and it is present in the blood associated with plasma lipoproteins. It is an essential cofactor for the binding of certain antiphospholipid antibodies (APA) to anionic phospholipid. APOH binds to various kinds of negatively charged substances such as heparin, phospholipids, and dextran sulfate. APOH may prevent activation of the intrinsic blood coagulation cascade by binding to phospholipids on the surface of damaged cells. APOH appears to completely inhibit serotonin release by the platelets and prevents subsequent waves of the ADP-induced aggregation. The activity of APOH appears to involve the binding of agglutinating, negatively charged compounds, and inhibits agglutination by the contact activation of the intrinsic blood coagulation pathway. APOH causes a reduction of the prothrombinase binding sites on platelets and reduces the activation caused by collagen when thrombin is present at physiological serum concentrations of APOH suggesting a regulatory role of APOH in coagulation. APOH plasma concentrations are strongly associated to metabolic syndrome alterations and vascular disease in type 2 diabetic and could be considered as a clinical marker of cardiovascular risk. APOH is found on several classes of lipoproteins, and is involved in the activation of lipoprotein lipase in lipid metabolism. This single-chain glycoprotein also has been implicated in several physiologic pathways including coagulation and the production of hypertension, which are related to the pathogenesis of primary cerebral hemorrhage (PICH).