

# Recombinant Human APOH Protein (Met1-Cys345), His-tagged

**Cat. No.** APOH-506H    **Lot. No.** (See product label)

## SPECIFICATION

**Product Overview**      Recombinant Human APOH Protein (NP\_000033.2) (Met1-Cys345) was produced by Baculovirus-Insect Cells expression system. This protein was expressed with a polyhistidine tag at the C-terminus.

**Species**                      Human

**Source**                        Insect Cells

**ProteinLength**              Met1-Cys345

**Description**                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

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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).

<b>Predicted N Terminal</b>	Gly 20
<b>Form</b>	Lyophilized from sterile PBS, pH 7.5. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
<b>Molecular Mass</b>	The recombinant human APOH consists of 337 amino acids and predicts a molecular mass of 37.7 kDa.
<b>Endotoxin</b>	< 1.0 EU per µg protein as determined by the LAL method.
<b>Purity</b>	> 95 % as determined by SDS-PAGE.
<b>Stability</b>	Samples are stable for up to twelve months from date of receipt at -70 centigrade.
<b>Storage</b>	Store it under sterile conditions at -20 centigrade to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.2 mg/ml. Centrifuge the vial at 4°C before opening to recover the entire contents.
<b>Shipping</b>	In general, recombinant proteins are provided as lyophilized powder which are

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shipped at ambient temperature.

Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

## GENE INFORMATION

<b>Gene Name</b>	APOH apolipoprotein H (beta-2-glycoprotein I) [ Homo sapiens ]
<b>Official Symbol</b>	APOH
<b>Synonyms</b>	APOH; B2G1; beta-2-glycoprotein 1; beta 2 glycoprotein I; BG; B2GPI; apo-H; beta(2)GPI; B2GP1;
<b>Gene ID</b>	350
<b>mRNA Refseq</b>	NM_000042
<b>Protein Refseq</b>	NP_000033
<b>MIM</b>	138700
<b>UniProt ID</b>	P02749

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