

Apolipoprotein H Active Protein | APOH active protein

Apolipoprotein H Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257970

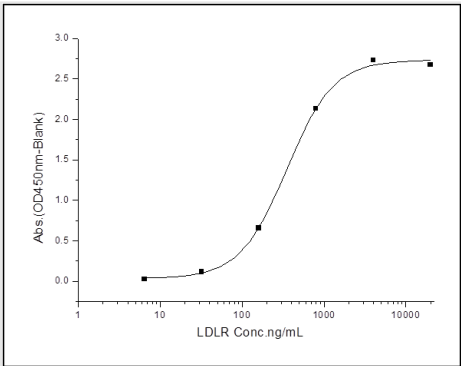
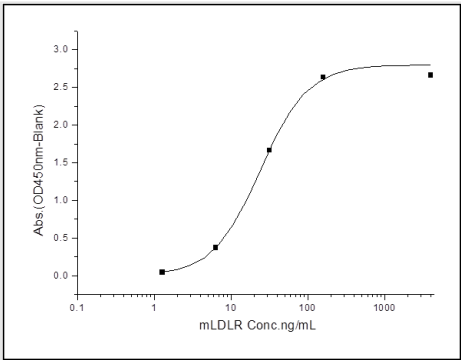
HOST
HEK293 Cells

PRODUCT SYNONYMS

Apolipoprotein H; Apolipoprotein H Protein; Human; Recombinant (His Tag); Human Apolipoprotein H/APOH Protein (His Tag); B2G1 Protein; B2GP1 Protein; BG Protein; apolipoprotein H (beta-2-glycoprotein I); APOH active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>96% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Cys34 5
Species	Human
Activity	1. Measured by its binding ability in a functional ELISA. 2. Immobilized human APOH-his at 2ug/mL (100uL/well) can bind biotinylated human LDLR-his. The EC50 of biotinylated human LDLR-his is 0.35ug/mL. 3. Immobilized human APOH-his at 2ug/mL (100uL/well) can bind biotinylated mouse LDLR-his. The EC50 of biotinylated mouse LDLR-his is 26ng/mL.
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Gly 20
Tag	C-His
Protein Construction	A DNA sequence encoding the human APOH (NP_000033.2)(Met 1-Cys 345) was expressed, with a polyhistidine tag at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.



Application Data
Measured by its binding ability in a functional ELISA. Immobilized human APOH-his at 2 ug/mL (100 ul/well) can bind biotinylated mouse LDLR-his, The EC50 of biotinylated mouse LDLR-his is 26 ng/mL.

Application Data
Measured by its binding ability in a functional ELISA. Immobilized human APOH-his at 2 ug/mL (100 ul/well) can bind biotinylated human LDLR-his, The EC50 of biotinylated human LDLR-his is 0.35 ug/mL.



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for APOH active protein

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).

References

Kamboh MI, et al. (1998) Genetics of apolipoprotein H (beta2-glycoprotein I) and anionic phospholipid binding. *Lupus*. 7 Suppl 2: S10-3. Singh P, et al. (2002) Genetics of apolipoprotein H (beta2-glycoprotein I) polymorphism in India. *Ann Hum Biol*. 29(3): 247-55. Xia J, et al. (2004) Apolipoprotein H gene polymorphisms and risk of primary cerebral hemorrhage in a Chinese population. *Cerebrovasc Dis*. 17(2-3): 197-203. Chen Q, et al. (2006) Complete DNA sequence variation in the apolipoprotein H (beta-glycoprotein I) gene and identification of informative SNPs. *Ann Hum Genet*. 70(Pt 1): 1-11. Leduc MS, et al. (2008) Comprehensive evaluation of apolipoprotein H gene (APOH) variation identifies novel associations with measures of lipid metabolism in GENOA. *J Lipid Res*. 49(12): 2648-56.

NCBI AND UNIPROT INFORMATION

NCBI GI # 153266841

NCBI GeneID	350
NCBI Accession #	NP_000033.2
NCBI GenBank Nucleotide #	NM_000042.2
UniProt Accession #	P02749; Q9UCN7; B2R9M3
Molecular Weight	48000
NCBI Official Full Name	beta-2-glycoprotein 1
NCBI Official Synonym Full Names	apolipoprotein H (beta-2-glycoprotein I)
NCBI Official Symbol	APOH
NCBI Official Synonym Symbols	BG; B2G1; B2GP1
NCBI Protein Information	beta-2-glycoprotein 1; B2GPI; apo-H; beta(2)GPI; APC inhibitor; antidiolipin cofactor; activated protein C-binding protein
UniProt Protein Name	Beta-2-glycoprotein 1
UniProt Gene Name	APOH
UniProt Synonym Gene Names	B2G1; Apo-H; B2GPI; Beta(2)GPI
UniProt Entry Name	APOH_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-apoh-active-protein/apolipoprotein-h/257970>