

Mouse anti-Human Apolipoprotein H Monoclonal Antibody | anti-APOH antibody

Anti-Apolipoprotein H Antibody, Mouse Monoclonal

CATALOG # AAA255363	HOST Mouse	REACTIVITY Human	APPLICATIONS Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay, ELISA
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PRODUCT SYNONYMS

Apolipoprotein H; Monoclonal Antibody; Anti-Apolipoprotein H Antibody; Mouse Monoclonal; Apolipoprotein H/APOH Antibody; Mouse MAb; apolipoprotein H (beta-2-glycoprotein I); Anti-B2G1 Antibody; Anti-B2GP1 Antibody; Anti-BG Antibody; anti-APOH antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG1
Clone Number	4A2F8H12
Specificity	Human APOH/B2G1
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-APOH antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), ELISA
Immunogen	Recombinant Human APOH protein
Conjugation	Unconjugated
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human APOH (rh APOH). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



FCM/FACS (Flow Cytometry)

Flow cytometric analysis of Human APOH expression on MDA-MB-231 cells. The cells were treated according to manufacturer's manual (BD Pharmingen), stained with purified anti-Human APOH, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.



IF (Immunofluorescence)

Immunofluorescence staining of Human APOH in HepG2 or Hela cells. Cells were fixed with 4% PFA, permeabilized with 1% Triton X-100 in PBS, blocked with 10% serum, and incubated with mouse anti-Human APOH monoclonal antibody (1:60). Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-mouse IgG secondary antibody (left panel, captured by laser confocal scanning microscope; right panel, captured by fluorescence microscope), counterstained with DAPI (blue). Positive staining was localized to cytoplasm.

ADDITIONAL INFORMATION

Related Product Information for anti-APOH antibody	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 agglutenating, 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; B2GPI
NCBI Protein Information	beta-2-glycoprotein 1; B2GPI; apo-H; beta(2)GPI; APC inhibitor; antiscavenger 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

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