

Anti-Apolipoprotein J (GOAT) Antibody

APOLIPOPROTEIN J Antibody Catalog # ASR5076

Specification

Anti-Apolipoprotein J (GOAT) Antibody - Product Information

Host Conjugate Target Species Reactivity Clonality Application Application Note	Goat Unconjugated Human Human Polyclonal WB, IHC, E, IP, I, LCI Anti-apolipoprotein antibodies have been used for indirect trapping ELISA for quantitation of antigen in serum using a standard curve, for immunoprecipitation and for western blotting for highly sensitive qualitative analysis.
Physical State Buffer	Liquid (sterile filtered) 0.125 M Sodium Borate, 0.075 M Sodium
Immunogen	Chloride, 0.005 M EDTA, pH 8.0 apoLipoprotein Type J was isolated from human plasma by density gradient centrifugation followed by HPLC purification.
Preservative	0.01% (w/v) Sodium Azide

Anti-Apolipoprotein J (GOAT) Antibody - Additional Information

Gene ID 1191

Other Names 1191

Purity

This product has been prepared by immunoaffinity chromatography using immobilized antigens followed by extensive cross-adsorption against other apoLipoproteins and human serum proteins to remove any unwanted specificities. Typically less than 1% cross reactivity against other types of apoLipoprotein was detected by ELISA against purified standards. This antibody reacts with human apoLipoprotein J and has negligible cross-reactivity with Type A-I, A-II, B, C-I, C-II, C-III and E apoLipoproteins. Specific cross reaction of anti-apoLipoprotein antibodies with antigens from other species has not been determined. Non-specific cross reaction of anti-apoLipoprotein antibodies with other human serum proteins is negligible.

Storage Condition

Store vial at 4° C prior to opening. This product is stable at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage mix with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.

Precautions Note



This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Apolipoprotein J (GOAT) Antibody - Protein Information

Name CLU (HGNC:2095)

Function

[Isoform 1]: Functions as extracellular chaperone that prevents aggregation of non native proteins (PubMed:11123922, PubMed:19535339). Prevents stress-induced aggregation of blood plasma proteins (PubMed:11123922, PubMed:12176985, PubMed:17260971, PubMed:19996109). Inhibits formation of amyloid fibrils by APP, APOC2, B2M, CALCA, CSN3, SNCA and aggregation-prone LYZ variants (in vitro) (PubMed:12047389, PubMed:17407782, PubMed:17412999). Does not require ATP (PubMed:11123922). Maintains partially unfolded proteins in a state appropriate for subsequent refolding by other chaperones, such as HSPA8/HSC70 (PubMed:11123922). Does not refold proteins by itself (PubMed:11123922). Binding to cell surface receptors triggers internalization of the chaperone-client complex and subsequent lysosomal or proteasomal degradation (PubMed: 21505792). Protects cells against apoptosis and against cytolysis by complement: inhibits assembly of the complement membrane attack complex (MAC) by preventing polymerization of C9 pore component of the MAC complex (PubMed:2780565, PubMed:1903064, PubMed:2601725, PubMed:2721499, PubMed:1551440, PubMed:9200695, PubMed:34667172). Intracellular forms interact with ubiquitin and SCF (SKP1-CUL1-F-box protein) E3 ubiguitin-protein ligase complexes and promote the ubiguitination and subsequent proteasomal degradation of target proteins (PubMed:20068069). Promotes proteasomal degradation of COMMD1 and IKBKB (PubMed: 20068069). Modulates NF-kappa-B transcriptional activity (PubMed: 12882985). A mitochondrial form suppresses BAX-dependent release of cytochrome c into the cytoplasm and inhibit apoptosis (PubMed: 16113678, PubMed:17689225). Plays a role in the regulation of cell proliferation (PubMed:19137541). An intracellular form suppresses stress-induced apoptosis by stabilizing mitochondrial membrane integrity through interaction with HSPA5 (PubMed:22689054). Secreted form does not affect caspase or BAX- mediated intrinsic apoptosis and TNF-induced NF-kappa-B-activity (PubMed:<a href="http://www.uniprot.org/citations/24073260"



target="_blank">24073260). Secreted form act as an important modulator during neuronal differentiation through interaction with STMN3 (By similarity). Plays a role in the clearance of immune complexes that arise during cell injury (By similarity).

Cellular Location

[Isoform 1]: Secreted. Note=Can retrotranslocate from the secretory compartments to the cytosol upon cellular stress. [Isoform 6]: Cytoplasm. Note=Keeps cytoplasmic localization in stressed and unstressed cell.

Tissue Location

Detected in blood plasma, cerebrospinal fluid, milk, seminal plasma and colon mucosa. Detected in the germinal center of colon lymphoid nodules and in colon parasympathetic ganglia of the Auerbach plexus (at protein level). Ubiquitous. Detected in brain, testis, ovary, liver and pancreas, and at lower levels in kidney, heart, spleen and lung.

Anti-Apolipoprotein J (GOAT) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

Anti-Apolipoprotein J (GOAT) Antibody - Images

Anti-Apolipoprotein J (GOAT) Antibody - Background

Apolipoprotein J Antibody functions as a secreted chaperone that prevents aggregation of nonnative proteins. It prevents stress-induced aggregation of blood plasma proteins and inhibits the formations of amyloid fibrils. Apolipoprotein J does not require ATP or refold proteins by itself. It maintains partially unfolded proteins in a state for subsequent refolding by other chaperones. It is shown to be involved in several basic biological events such as cell death, tumor progression, and neurodegenerative disorders. Binding to cell surface receptors it triggers internalization of chaperone-client complex and subsequent lysosomal or proteasomal degradation. It modulates NF-kappa-B transcriptional activity. Nuclear isoforms promote apoptosis while mitochondrial isoforms suppress BAX-dependent release of cytochrome c into the cytoplasm and inhibit apoptosis. Anti-Apolipoprotein J Antibody is useful for researchers interested in the immune system, Ubiquitin pathways, and cardiovascular research.