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CLU Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP10943a

Specification

CLU Antibody (N-term) Blocking peptide - Product Information

Primary Accession P10909

CLU Antibody (N-term) Blocking peptide - Additional Information

Gene ID 1191

Other Names
Clusterin, Aging-associated gene 4 protein, Apolipoprotein J, Apo-J, Complement cytolysis inhibitor, CLI, Complement-associated protein SP-40, Ku70-binding protein 1, NA1/NA2, Testosterone-repressed prostate message 2, TRPM-2, Clusterin beta chain, ApoJalpha, Complement cytolysis inhibitor a chain, Clusterin alpha chain, ApoJbeta, Complement cytolysis inhibitor b chain, CLU, APOJ, CLI, KUB1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CLU Antibody (N-term) Blocking peptide - 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:17412999, PubMed:17407782). 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 (PubMed:2780565). Intracellular forms interact with ubiquitin and SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes and promote the ubiquitination 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: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.

CLU Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

CLU Antibody (N-term) Blocking peptide - Images

CLU Antibody (N-term) Blocking peptide - Background

The protein encoded by this gene appears to be involved inseveral basic biological events such as cell death, tumorprogression, and neurodegenerative disorders. However, the functionof this protein is unknown. Three transcript variants encodingdifferent isoforms have been found for this gene, and one of themis secreted and processed into a mature form.

CLU Antibody (N-term) Blocking peptide - References

Jun, G., et al. Arch. Neurol. (2010) In press :Zhou, Y., et al. DNA Cell Biol. (2010) In press :Mengel-From, J., et al. Neurobiol. Aging (2010) In press :Golenkina, S.A., et al. Mol. Biol. (Mosk.) 44(4):620-626(2010)Thambisetty, M., et al. Arch. Gen. Psychiatry 67(7):739-748(2010)