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CLU antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14618

Product Information

Application	WB
Primary Accession	P10909
Other Accession	NM_001831, NP_001822
Reactivity	Human, Mouse, Rat, Rabbit, Guinea Pig, Horse
Predicted	Human, Mouse, Rat, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52495

Additional Information

Gene ID	1191
Alias Symbol	AAG4, APOJ, CLI, KUB1, MGC24903, SGP-2, SGP2, SP-40, TRPM-2, TRPM2, APO-J, NA1/NA2
Other Names	Clusterin, Aging-associated gene 4 protein, Apolipoprotein J, Apo-J, Complement cytolysis inhibitor, CLI, Complement-associated protein SP-40, 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	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CLU antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CLU antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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 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

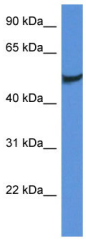
Detected in blood plasma, cerebrospinal fluid, milk, seminal plasma and colon mucosa. Detected in the germinal center of colon lymphoid nodules and in colon parasympathetic ganglia of the Auerbach plexus (at protein level). Ubiquitous. Detected in brain, testis, ovary, liver and pancreas, and at lower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

References

Jenne D.E.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:7123-7127(1989).
Wong P.,et al.Eur. J. Biochem. 221:917-925(1994).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Li W.B.,et al.Submitted (JUL-2004) to the EMBL/GenBank/DDBJ databases.
Bechtel S.,et al.BMC Genomics 8:399-399(2007).

Images

CLU antibody - C-terminal region (AI14618) validated by WB using Fetal Brain Lysate at 1µg/ml.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.