

## Rabbit CLU Polyclonal Antibody | anti-CLU antibody

CLU Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                       |
|-----------|--------|-------------------|------------------------------------------------------------------------------------|
| AAA326192 | Rabbit | Human, Mouse, Rat | ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot |

### PRODUCT SYNONYMS

CLU; Polyclonal Antibody; CLU Antibody; 40; AAG 4; AAG4; Aging associated protein 4; Aging-associated gene 4 protein; A1893575; APO J; Apo-J; APOJ; ApoJalpha; ApoJbeta; Apolipoprotein J; ApolipoproteinJ; CLI; CLU1; CLU2; CLUS\_HUMAN; Clusterin alpha chain; Clusterin; Clusterin beta chain; Complement associated protein SP 40 40; Complement associated protein SP 40; Complement associated protein SP40; Complement cytolysis inhibitor a chain; Complement cytolysis inhibitor; Complement cytolysis inhibitor b chain; Complement lysis inhibitor; Complement-associated protein SP-40; D14Ucla3; Dimeric acid glycoprotein; Glycoprotein 80; Glycoprotein III; GP80; Ku70-binding protein 1; KUB 1; KUB1; MGC24903; NA1/NA2; RATTRPM2B; SGP 2; SGP2; SP 40; SP40; Sugp-2; Sulfated glycoprotein 2; Testosterone repressed prostate message 2; Testosterone-repressed prostate message 2; TRPM 2; TRPM-2; TRPM2; TRPM2B; Trpmb; anti-CLU antibody

### PRODUCT SPECIFICATIONS

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                          | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Reactivity                                    | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Clonality                                     | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Isotype                                       | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity                                   | CLU antibody detects endogenous levels of total CLU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Purity/Purification                           | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Form/Format                                   | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Concentration                                 | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Sequence Length                               | 449                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Applicable Applications for anti-CLU antibody | ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Immunogen                                     | A synthesized peptide derived from human CLU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Subcellular Location                          | Secreted. Can retrotranslocate from the secretory compartments to the cytosol upon cellular stress and Nucleus. Cytoplasm. Mitochondrion Membrane. Cytoplasm, Cytosol. Microsome. Endoplasmic Reticulum. Cytoplasmic vesicle, secretory vesicle, chromaffin granule. Isoforms lacking the N-terminal signal sequence have been shown to be cytoplasmic and/or nuclear. Secreted isoforms can retrotranslocate from the secretory compartments to the cytosol upon cellular stress. Detected in perinuclear foci that may be aggresomes containing misfolded, ubiquitinated proteins. Detected at the mitochondrion membrane upon induction of apoptosis. |
| Tissue Specificity                            | 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.                                                                                                                                                                                                                                                                                                 |
| Conjugation                                   | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Preparation and Storage                       | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

IMAGES



IF (Immunofluorescence)

AAA326192 staining HeLa cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



WB (Western Blot)

Western blot analysis of extracts of Y79, using CLU antibody. The lane on the left is treated with the antigen-specific peptide.



WB (Western Blot)

Western blot analysis of extracts from hepg2, using CLU Antibody. Lane 1 was treated with the blocking peptide.



IHC (Immunohistochemistry)

AAA326192 at 1/100 staining Mouse colon tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-CLU antibody

Description: The protein encoded by this gene is a secreted chaperone that can under some stress conditions also be found in the cell cytosol. It has been suggested to be involved in several basic biological events such as cell death, tumor progression, and neurodegenerative disorders. Alternate splicing results in both coding and non-coding variants.[provided by RefSeq, May 2011]

Function: Isoform 1 functions as extracellular chaperone that prevents aggregation of nonnative proteins. Prevents stress-induced aggregation of blood plasma proteins. Inhibits formation of amyloid fibrils by APP, APOC2, B2M, CALCA, CSN3, SNCA and aggregation-prone LYZ variants (in vitro). Does not require ATP. Maintains partially unfolded proteins in a state appropriate for subsequent refolding by other chaperones, such as HSPA8/HSC70. Does not refold proteins by itself. Binding to cell surface receptors triggers internalization of the chaperone-client complex and subsequent lysosomal or proteasomal degradation. Secreted isoform 1 protects cells against apoptosis and against cytolysis by complement. Intracellular isoforms 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. Promotes proteasomal degradation of COMMD1 and IKBKB. Modulates NF-kappa-B transcriptional activity. Nuclear isoforms promote apoptosis. Mitochondrial isoforms suppress BAX-dependent release of cytochrome c into the cytoplasm and inhibit apoptosis. Plays a role in the regulation of cell proliferation.

Subunit Structure: Antiparallel disulfide-linked heterodimer of an alpha chain and a beta chain. Self-associates and forms higher oligomers. Interacts with a broad range of misfolded proteins, including APP, APOC2 and LYZ. Slightly acidic pH promotes interaction with misfolded proteins. Forms high-molecular weight oligomers upon interaction with misfolded proteins. Interacts with APOA1, LRP2, CLUAP1 AND PON1. Interacts with the complement complex. Interacts (via alpha chain) with XRCC6. Interacts with SYVN1, COMMD1, BTRC, CUL1 and with ubiquitin and SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes. Interacts (via alpha chain) with BAX in stressed cells, where BAX undergoes a conformation change leading to association with the mitochondrial membrane. Does not interact with BAX in unstressed cells. Found in a complex with LTF, CLU, EPPIN and SEMG1.

Post-translational Modifications: Isoform 1 is proteolytically cleaved on its way through the secretory system, probably within the Golgi lumen. Polyubiquitinated, leading to proteasomal degradation. Heavily N-glycosylated. About 30% of the protein mass is comprised of complex N-linked carbohydrate.

Similarity: Belongs to the clusterin family.

NCBI AND UNIPROT INFORMATION

|                           |             |
|---------------------------|-------------|
| NCBI GI #                 | 355594753   |
| NCBI GeneID               | 1191        |
| NCBI Accession #          | NP_001822.3 |
| NCBI GenBank Nucleotide # | NM_001831.3 |

|                                  |                                                                                                                                                                                                       |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UniProt Accession #              | <a href="#">P10909</a> ; <a href="#">P11380</a> ; <a href="#">P11381</a> ; <a href="#">Q2TU75</a> ; <a href="#">Q5HYC1</a> ; <a href="#">Q7Z5B9</a> ; <a href="#">B2R9Q1</a> ; <a href="#">B3KSE6</a> |
| Molecular Weight                 | Observed: 53 kDa<br>Predicted: 53 kDa                                                                                                                                                                 |
| NCBI Official Full Name          | clusterin preproprotein                                                                                                                                                                               |
| NCBI Official Synonym Full Names | clusterin                                                                                                                                                                                             |
| NCBI Official Symbol             | CLU                                                                                                                                                                                                   |
| NCBI Official Synonym Symbols    | CLI; AAG4; APOJ; CLU1; CLU2; KUB1; SGP2; APO-J; SGP-2; SP-40; TRPM2; TRPM-2; NA1/NA2                                                                                                                  |
| NCBI Protein Information         | clusterin                                                                                                                                                                                             |
| UniProt Protein Name             | Clusterin                                                                                                                                                                                             |
| UniProt Gene Name                | <b>CLU</b>                                                                                                                                                                                            |
| UniProt Synonym Gene Names       | APOJ; CLI; KUB1; Apo-J; CLI; TRPM-2                                                                                                                                                                   |

**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://stage.aaabiotech.com/polyclonal/clu-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326192>