

**Clusterin Polyclonal Antibody**  
Catalog # AP69164**Specification****Clusterin Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IF
Primary Accession	<a href="#">P10909</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**Clusterin Polyclonal Antibody - Additional Information**

Gene ID 1191

**Other Names**

CLU; APOJ; CLI; KUB1; AAG4; 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 m

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.  
IHC-P~~N/A  
IF~~1:50~200

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**Clusterin Polyclonal Antibody - Protein Information**Name CLU ([HGNC:2095](#))**Function**

[Isoform 1]: Functions as extracellular chaperone that prevents aggregation of non native proteins (PubMed:<a href="http://www.uniprot.org/citations/11123922" target="\_blank">11123922</a>, PubMed:<a href="http://www.uniprot.org/citations/19535339" target="\_blank">19535339</a>). Prevents stress-induced aggregation of blood plasma proteins (PubMed:<a href="http://www.uniprot.org/citations/11123922" target="\_blank">11123922</a>, PubMed:<a href="http://www.uniprot.org/citations/12176985" target="\_blank">12176985</a>, PubMed:<a href="http://www.uniprot.org/citations/17260971" target="\_blank">17260971</a>, PubMed:<a href="http://www.uniprot.org/citations/19996109" target="\_blank">19996109</a>). Inhibits formation of amyloid fibrils by APP, APOC2, B2M, CALCA, CSN3, SNCA and aggregation-prone LYZ variants (in vitro) (PubMed:<a href="http://www.uniprot.org/citations/12047389" target="\_blank">12047389</a>, PubMed:<a href="http://www.uniprot.org/citations/17407782" target="\_blank">17407782</a>).

target="\_blank">17407782</a>, PubMed:<a href="http://www.uniprot.org/citations/17412999" target="\_blank">17412999</a>). Does not require ATP (PubMed:<a href="http://www.uniprot.org/citations/11123922" target="\_blank">11123922</a>). Maintains partially unfolded proteins in a state appropriate for subsequent refolding by other chaperones, such as HSPA8/HSC70 (PubMed:<a href="http://www.uniprot.org/citations/11123922" target="\_blank">11123922</a>). Does not refold proteins by itself (PubMed:<a href="http://www.uniprot.org/citations/11123922" target="\_blank">11123922</a>). Binding to cell surface receptors triggers internalization of the chaperone-client complex and subsequent lysosomal or proteasomal degradation (PubMed:<a href="http://www.uniprot.org/citations/21505792" target="\_blank">21505792</a>). 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:<a href="http://www.uniprot.org/citations/2780565" target="\_blank">2780565</a>, PubMed:<a href="http://www.uniprot.org/citations/1903064" target="\_blank">1903064</a>, PubMed:<a href="http://www.uniprot.org/citations/2601725" target="\_blank">2601725</a>, PubMed:<a href="http://www.uniprot.org/citations/2721499" target="\_blank">2721499</a>, PubMed:<a href="http://www.uniprot.org/citations/1551440" target="\_blank">1551440</a>, PubMed:<a href="http://www.uniprot.org/citations/9200695" target="\_blank">9200695</a>, PubMed:<a href="http://www.uniprot.org/citations/34667172" target="\_blank">34667172</a>). 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:<a href="http://www.uniprot.org/citations/20068069" target="\_blank">20068069</a>). Promotes proteasomal degradation of COMMD1 and IKBKB (PubMed:<a href="http://www.uniprot.org/citations/20068069" target="\_blank">20068069</a>). Modulates NF-kappa-B transcriptional activity (PubMed:<a href="http://www.uniprot.org/citations/12882985" target="\_blank">12882985</a>). A mitochondrial form suppresses BAX-dependent release of cytochrome c into the cytoplasm and inhibit apoptosis (PubMed:<a href="http://www.uniprot.org/citations/16113678" target="\_blank">16113678</a>, PubMed:<a href="http://www.uniprot.org/citations/17689225" target="\_blank">17689225</a>). Plays a role in the regulation of cell proliferation (PubMed:<a href="http://www.uniprot.org/citations/19137541" target="\_blank">19137541</a>). An intracellular form suppresses stress-induced apoptosis by stabilizing mitochondrial membrane integrity through interaction with HSPA5 (PubMed:<a href="http://www.uniprot.org/citations/22689054" target="\_blank">22689054</a>). 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</a>). 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

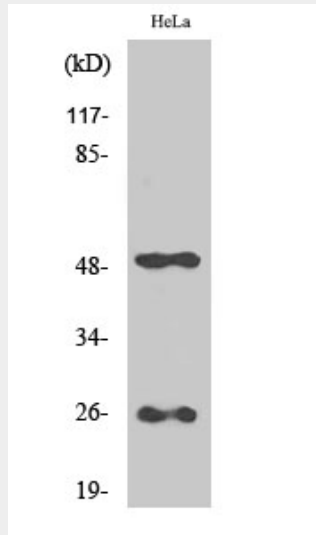
Detected in blood plasma, cerebrospinal fluid, milk, seminal plasma and colon mucosa. Detected in the germinal center of colon lymphoid nodules and in colon parasympathetic ganglia of the Auerbach plexus (at protein level). Ubiquitous. Detected in brain, testis, ovary, liver and pancreas, and at lower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

### Clusterin Polyclonal Antibody - Protocols

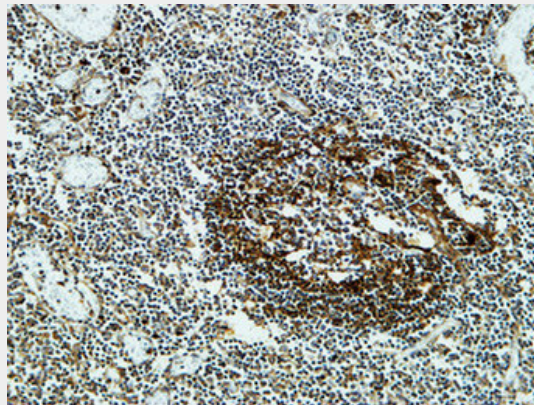
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

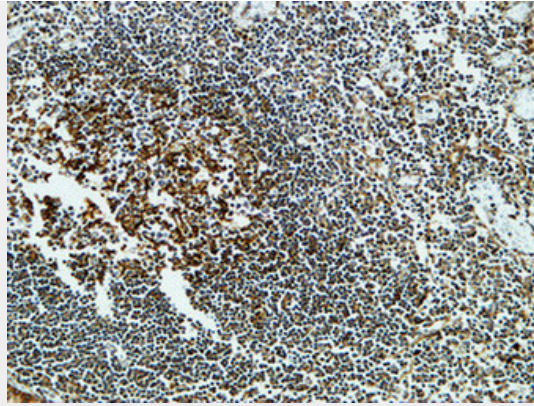
### Clusterin Polyclonal Antibody - Images



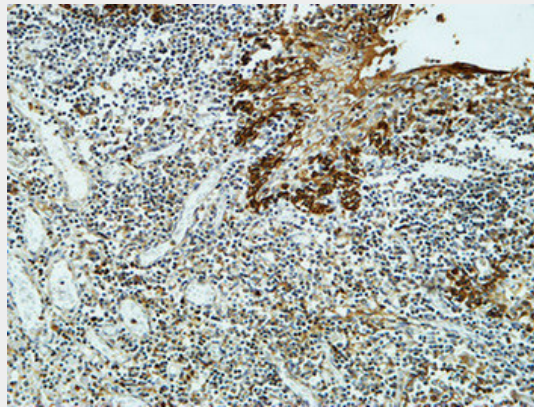
Western Blot analysis of various cells using Clusterin Polyclonal Antibody



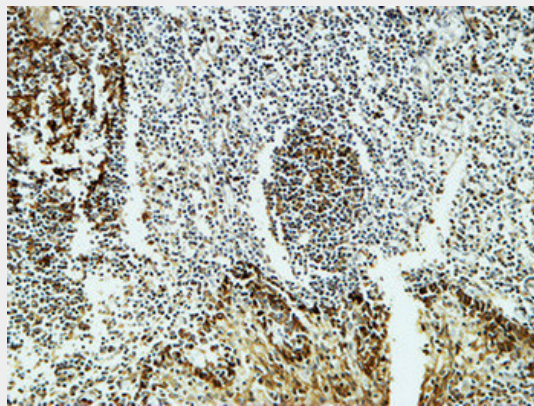
Immunohistochemical analysis of paraffin-embedded Human Amygdala. 1, Antibody was diluted at 1:400(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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### **Clusterin Polyclonal Antibody - Background**

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.