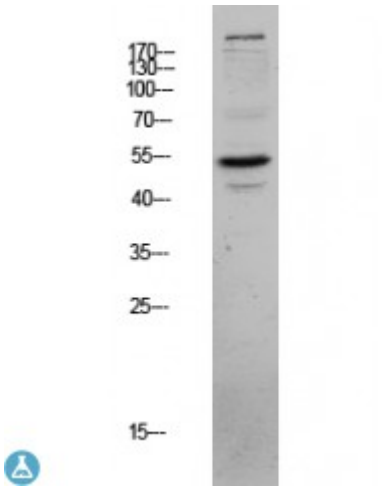
Anti-CLUS antibody



Description	Rabbit polyclonal to CLUS.

Model	STJ99644
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human CLUS.
Gene ID	1191
Gene Symbol	CLU
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of CLUS.
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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	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

Molecular Weight	52 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:2095OMIM:185430
Alternative 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
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.
Cellular Localization	Isoform 1: Secreted. Can retrotranslocate from the secretory compartments to the cytosol upon cellular stress.. Nucleus. Cytoplasm. Mitochondrion membrane. Peripheral membrane protein. Cytoplasmic side. 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.
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.