Clusterin (CLU) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Clusterin, ELISA Kit
Full Product Name	Human Clusterin ELISA Kit
Product Gene Name	CLU elisa kit
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Samples	Body fluids, tissue homogenates, secretions or feces samples
Detection Range	31.2 ug/ml - 1000 ug/ml
Sensitivity	5.0 ug/ml.
Specificity	No significant cross-reactivity or interference between this analyte and analogues is observed.
Preparation and Storage	Store all reagents at 2-8 degree C
Inter-assay Precision	Inter-assay CV (%) is less than 15%. [CV(%) = SD/mean ×100].
Intra-assay Precision	Intra-assay CV (%) is less than 15%
Molecular Weight	52,495 Da
Chromosome Location	Chromosome: 8; NC_000008.10 (27454434..27472328, complement). Location: 8p21-p12
OMIM	185430
3D Structure	ModBase 3D Structure for P10909
Related Product Information for CLU elisa kit	Background/Introduction: This Quantitative Sandwich ELISA kit is only for in vitro research use only! This kit is intended to be used for determination the level of CLU (hereafter termed "analyte") in undiluted original Human body fluids, tissue homogenates, secretions or feces samples. This kit is NOT suitable for assaying non-biological sources of substances.
Other Notes	Small volumes of CLU elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CLU purchase	MBS046795 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Clusterin, ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CLU. The ELISA analytical biochemical technique of the MBS046795 kit is based on CLU antibody-CLU antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CLU antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CLU. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CLU. It may not necessarily be applicable to this product.

NCBI GI #	355594753
NCBI GeneID	1191
NCBI Accession #	NP_001822.3

UniProt Primary Accession #	P10909
UniProt Secondary Accession #	P11380; P11381; Q2TU75; Q5HYC1; Q7Z5B9; B2R9Q1; B3KSE6
UniProt Related Accession #	P10909; AAB25217
GenBank Nucleotide #	NM_001831.3
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
UniProt Protein Name	Clusterin
UniProt Synonym Protein Names	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-2Cleaved into the following 2 chains:Clusterin beta chain; Alternative name(s):; ApoJalpha; Complement cytolysis inhibitor a chainClusterin alpha chain; Alternative name(s):; ApoJbeta; Complement cytolysis inhibitor b chain
Protein Family	Clusterin
UniProt Gene Name	CLU
UniProt Synonym Gene Names	APOJ; CLI; KUB1; Apo-J; CLI; TRPM-2
UniProt Entry Name	CLUS_HUMAN
NCBI Protein Information	clusterin; apolipoprotein J; ku70-binding protein 1; sulfated glycoprotein 2; aging-associated protein 4; complement lysis inhibitor; complement cytolysis inhibitor; complement-associated protein SP-40,40; testosterone-repressed prostate message 2
NCBI Summary for CLU	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]

UniProt Comments for CLU	CLU: 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. Belongs to the clusterin family. 5 isoforms of the human protein are produced by alternative splicing. Protein type: Secreted; Apoptosis; Mitochondrial; Secreted, signal peptide Chromosomal Location of Human Ortholog: 8p21-p12 Cellular Component: extracellular matrix; Golgi apparatus; extracellular space; mitochondrion; perinuclear region of cytoplasm; endoplasmic reticulum; mitochondrial membrane; cytoplasm; extracellular region; cytosol; nucleus Molecular Function: protein binding; ubiquitin protein ligase binding; chaperone binding; ATPase activity; misfolded protein binding Biological Process: platelet activation; response to misfolded protein; release of cytochrome c from mitochondria; positive regulation of nitric oxide biosynthetic process; protein stabilization; positive regulation of apoptosis; response to virus; cell morphogenesis; microglial cell activation; positive regulation of tumor necrosis factor production; negative regulation of protein homooligomerization; complement activation; activation of NF-kappaB transcription factor; reverse cholesterol transport; platelet degranulation; myelin maintenance in the central nervous system; positive regulation of proteasomal ubiquitin-dependent protein catabolic process; protein import; innate immune response; lipid metabolic process; chaperone-mediated protein complex assembly; blood coagulation; complement activation, classical pathway
Research Articles on CLU	**1.** sCLU plays a positive role in non-small cell lung cancer cell proliferation, which may be mediated by the PI3K/AKT signaling pathway.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/clu-human-elisa-kits/clusterin/46795