

Product datasheet

Recombinant Human Clusterin alpha chain protein (His tag) ab220542

[1 Image](#)

Description

Product name	Recombinant Human Clusterin alpha chain protein (His tag)	
Purity	> 95 % SDS-PAGE.	
Endotoxin level	< 1.000 Eu/μg	
Expression system	HEK 293 cells	
Accession	<u>P10909</u>	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	<p>DQTVSDNELQEMSNQGSKYVNKEIQNAVNGVKQIKTLIEK TNEERKTLLS NLEEAKKKKEDALNETRESETKLKELPGVCNETMMALWE ECKPCLKQTCM KFYARVCRSGSGLVGRQLEE FLNQSSPFYFWMNGDRIDSLENDRQQT HMLDVMQDHFSRASSIIDELFQDRFFFTREPQDTYHYLPFS LPHRRPHFFF PKSRVRSLMPFSPYEPLNFHAMFQPFLEMIHEAQQAMDI HF HSPAFQ HPPTEFIREGDDDRTVCREIRHNSTGCLRMKDQCDKCREI LSVDCSTNNP SQAKLRRELDLQVAERLTRKYNELLKSYQWKMLNTSS LLEQLNEQFNW VSRLANLTQGEDQYLRVTTVASHTSDSDVPSGVTEVVV KLFSDSPITVT VPVEVSRKNPKFMETVAEKALQEYRKKHREE</p>	
Predicted molecular weight	51 kDa	
Amino acids	23 to 449	
Tags	His tag C-Terminus	
Additional sequence information	This product is for the mature full length protein. The signal peptide is not included. (NP_001822.3).	

Specifications

Our **Abpromise guarantee** covers the use of **ab220542** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Lyophilized

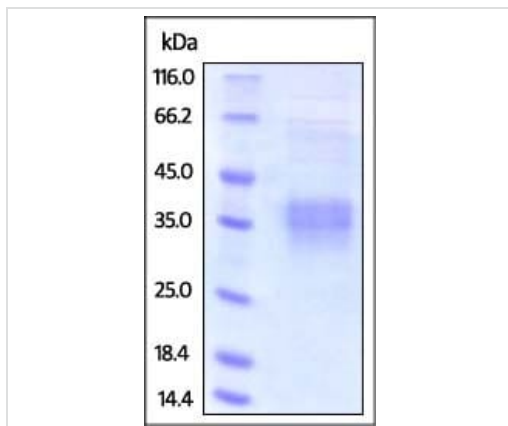
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.40 Constituents: 95% PBS, 5% Trehalose
Reconstitution	Reconstitute with sterile deionized water to a concentration of 200 µg/ml.

General Info

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.
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.
Sequence similarities	Belongs to the clusterin family.
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.
Cellular localization	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 and Secreted. Can retrotranslocate from the secretory compartments to the cytosol upon cellular stress.

Images



SDS-PAGE - Recombinant Human Clusterin alpha chain protein (His tag) (ab220542)

SDS-PAGE analysis of reduced ab220542 stained overnight with Coomassie Blue.

The protein migrates as 32-40 kDa under reducing conditions (SDS-PAGE).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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