abcam

Product datasheet

Recombinant Mouse Clusterin protein ab194035

Description

Product name	Recombinant Mouse Clusterin protein
Purity	> 95 % SDS-PAGE. Determined by SEC-HPLC and reducing SDS-PAGE.
Endotoxin level	< 0.100 Eu/µg
Expression system	HEK 293 cells
Accession	**Q06890**
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Mouse
Sequence	EQEVSDNELQELSTQGSRYINKEIQNAVQGVKHIKTLIEKTN AERKSLLN SLEEAKKKKEDALEDTRDSEMKLKAFPEVCNETMMALW EECKPCLKHTCM KFYARVCRSGSGLVGQQLEEFLNQSSPFYFWMNGDRIDS LLESDRQQSQV LDAMQDSFARASGIIDTLFQDRFFARELHDPHYFSPIGFPH KRPHFLYPK SRLVRSLMSPSHYGPPSFHNMFQPFFEMIHQAQQAMDV QLHSPAFQFPDV DFLREGEDDRTVCKEIRRNSTGCLKMKGQCEKCQEILSV DCSTNNPAQAN LRQELNDSLQVAERLTEQYKELLQSFQSKMLNTSSLLEQL NDQFNWVSQL ANLTQGEDKYYLRVSTVTTHSSDSEVPSRVTEVVVKLFDS DPITVVLPEE VSKDNPKFMDTVAEKALQEYRRKSRAEVDHHHHHH
Predicted molecular weight	50 kDa including tags
Amino acids	22 to 448
Tags	His tag C-Terminus
Additional sequence information	This product is for the mature full length protein, from aa 22 to 448. The signal peptide is not included.

Specifications

Our **Abpromise guarantee** covers the use of **ab194035** in the following tested applications.

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

Applications	HPLC SDS-PAGE
Form	Lyophilized

Preparation and Storage

Stability and Storage	Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -20°C. Reconstitute for long term storage. pH: 7.40 Constituents: 99% Phosphate Buffer, 0.87% Sodium chloride Lyophilized from a 0.2 µM filtered solution.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml.Dissolve the lyophilized protein in 1X PBS. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

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	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.

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

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