Clusterin/APOJ Protein, Mouse (HEK293, His)

Cat. No.:	HY-P70058
Synonyms:	rMuClusterin/CLU, His ; Clusterin; Apolipoprotein J; Clustrin; Sulfated glycoprotein 2
Species:	Mouse
Source:	HEK293
Accession:	Q06890 (E22-E448)
Gene ID:	12759
Molecular Weight:	(29-43)&67 kDa

PROPERTIES

AA Sequence	E Q E V S D N E L Q E L S T Q G S R Y I N K E I Q N A V Q G V K H I K T L I E K T N A E R K S L L N S L E E A K K K K E D A L E D T R D S E M K L K A F P E V C N E T M M A L W E E C K P C L K H T C M K F Y A R V C R S G S G L V G Q Q L E E F L N Q S S P F Y F W M N G D R I D S L L E S D R Q Q S Q V L D A M Q D S F A R A S G I I D T L F Q D R F F A R E L H D P H Y F S P I G F P H K R P H F L Y P K S R L V R S L M S P S H Y G P P S F H N M F Q P F F E M I H Q A Q Q A M D V Q L H S P A F Q F P D V D F L R E G E D D R T V C K E I R R N S T G C L K M K G Q C E K C Q E I L S V D C S T N N P A Q A N L R Q E L N D S L Q V A E R L T E Q Y K E L L Q S F Q S K M L N T S S L L E Q L N D Q F N W V S Q L A N L T Q G E D K Y Y L R V S T V T T H S S D S E V P S R V T E V V V K L F D S D P I T V V L P E E V S K D N P K F M D T V A E K A L Q E Y R R K S R A E
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	The Clusterin/APOJ Protein functions as an extracellular chaperone, preventing the aggregation of non-native proteins and

inhibiting stress-induced aggregation of blood plasma proteins. It plays a crucial role in inhibiting the formation of amyloid fibrils by various proteins, including APP, APOC2, B2M, CALCA, CSN3, and aggregation-prone LYZ variants in vitro. This chaperone, which does not require ATP, maintains partially unfolded proteins in a state suitable for subsequent refolding by other chaperones like HSPA8/HSC70, although it does not refold proteins independently. Upon binding to cell surface receptors, it triggers internalization of the chaperone-client complex, leading to lysosomal or proteasomal degradation. When secreted, it protects cells against apoptosis and complement-induced cytolysis. Intracellular forms interact with ubiquitin and SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes, promoting the ubiquitination and proteasomal degradation of target proteins. Clusterin/APOJ also modulates NF-kappa-B transcriptional activity and, following stress, promotes apoptosis. It inhibits apoptosis by interfering with BAX-dependent release of cytochrome c into the cytoplasm when associated with the mitochondrial membrane. Additionally, it plays a role in the regulation of cell proliferation and, when secreted, acts as a modulator during neuronal differentiation through interaction with STMN3. The protein is found in an antiparallel disulfide-linked heterodimer of an alpha chain and a beta chain, self-associates to form higher oligomers, and interacts with a broad range of misfolded proteins, including APP, APOC2, and LYZ. Interactions with various proteins, such as APOA1, LRP2, CLUAP1, PON1, XRCC6, SYVN1, COMMD1, BTRC, CUL1, BAX, HSPA5, BCL2L1, TGFBR2, ACVR1, STMN3, VLDLR, and LRP8, contribute to its diverse functions and regulatory roles.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA