

Human Clusterin / Apolipoprotein J / Apo-J / CLU Protein (His Tag)

Catalog Number: 11297-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

AAG4; APO-J; APOJ; CLI; CLU1; CLU2; KUB1; NA1/NA2; SGP-2; SGP2; SP-40; TRPM-2; TRPM2; AI893575; ApoJ; Cli; D14Ucla3; Sgp-2; Sgp2; SP-40; Sgpg-2

Protein Construction:

A DNA sequence encoding the human CLU isoform long (NP_001822.2) (Met 1-Glu 501) was expressed, with a C-terminal polyhistidine tag.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Asp 75 (β chain) & Ser 280 (α chain)

Molecular Mass:

The full length of recombinant human CLU comprises 438 amino acids and has a calculated molecular mass of 51.5 kDa (24.5 + 27). The apparent molecular mass of the recombinant protein is approximately 37-39 kDa in SDS-PAGE under reducing conditions, corresponding to the cleaved β chain, and α chain respectively.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

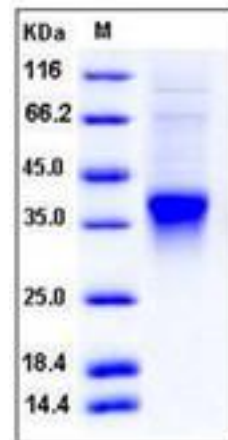
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Clusterin, also known as complement-associated protein SP-40, Complement cytolysis inhibitor, Apolipoprotein J, Testosterone-repressed prostate message 2, Aging-associated gene 4 protein, CLU and APOJ, is a secreted protein which belongs to the clusterin family. Clusterin/Apolipoprotein J/Apo-J is an enigmatic glycoprotein with a nearly ubiquitous tissue distribution and an apparent involvement in biological processes ranging from mammary gland involution to neurodegeneration in Alzheimer's disease. Its major form, a heterodimer, is secreted and present in physiological fluids, but truncated forms targeted to the nucleus have also been identified. Clusterin/Apolipoprotein J/Apo-J is a widely distributed glycoprotein with a wide range of biologic properties. A prominent and defining feature of clusterin is its marked induction in such disease states as glomerulonephritis, cystic renal disease, renal tubular injury, neurodegenerative conditions, atherosclerosis, and myocardial infarction. Upregulation of clusterin mRNA and protein levels detected in diverse disease states and in in vitro systems have led to suggestions that it functions in membrane lipid recycling, in apoptotic cell death, and as a stress-induced secreted chaperone protein, amongst others.

References

1. Silken JR, *et al.* (1994) The role of clusterin in tissue injury. *Biochem Cell Biol.* 72(11-12): 483-8.
2. Naik RR, *et al.* (2002) Biomimetic synthesis and patterning of silver nanoparticles. *Nat Mater.* 1(3): 169-72.
3. Djeu JY, *et al.* (2009) Clusterin and chemoresistance. *Adv Cancer Res.* 105: 77-92.

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Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>