9051 Mira Mesa Blvd, #910094
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Clusterin Human, Serum

Apolipoprotein-J Human, Serum
CYK0114

Product Overview

Name	Clusterin Human, Serum
Description	
Apolipoprotein-J Human, Serum	
Accession (Primary)	P10909
Synonyms	
CLI, AAG4, KUB1, SGP2, SGP-2, SP-40, TRPM2, MGC24903, Clusterin, Apolipoprotein J, Apo-J.	
Introduction	
Clusterin also named Apolipoprotein J is a 75-80 kD disulfide-linked heterodimeric protein containing about 30% of N-linked carbohydrate rich in sialic acid but truncated forms targeted to the nucleus have also been identified. The precursor polypeptide chain is cleaved proteolytically to remove the 22-mer secretory signal peptide and subsequently between residues 227/228 to generate the a and b chains. These are assembled in anti-parallel to give a heterodimeric molecule in which the cysteine-rich centers are linked by5 disulfide bridges and are flanked by 2 predicted coiled-coil a-helices and three predicted amphipathic a-helices. Across a wide range of species clusterin shows a high degree of sequence homology ranging from 70% to 80%. It is nearly ubiquitously expressed in most mammalian tissues and can be found in plasma, milk, urine, cerebrospinal fluid and semen. It is able to bind and form complexes with numerous partners such as immunoglobulins, lipids, heparin, bacteria, complement components, paraoxonase, beta amyloid, leptin and others. Clusterin has been ascribed a plethora of functions such as phagocyte recruitment, aggregation induction, complement attack prevention, apoptosis inhibition, membrane remodeling, lipid transport, hormone transport and/or scavenging, matrix metalloproteinase inhibition. Clusterin is an extracellular chaperone protecting cells from stress induced insults caused by degraded and misfolded protein precipitates. Clusterin is up- or down regulated on the mRNA or protein level in many pathological and clinically relevant situations including cancer, organ regeneration, infection, Alzheimer disease, retinitis pigmentosa, myocardial infarction, renal tubular damage, autoimmunity and others.	
Source	
Human Serum.	
Physical Appearance	
Filtered White lyophilized (freeze-dried) powder.	
Formulation	

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Human native Clusterin was filtered (0.4 µm) and lyophilized from 0.5mg/ml in phosphate buffer saline, pH 7.5 and 5% (w/v) trehalose.

Stability

Store lyophilized Clusterin at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles . Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.

Purity

Greater than 90% as determined by SDS PAGE.

Solubility

It is recommended to add deionized H 2 O to prepare a working stock solution of 0.5mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Precautions

Clusterin Human, Serum is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P10909)