

Product Datasheet

Product Name Human Serum Albumin

Cata No CB500975

Source Human Serum

Synonyms Serum albumin, ALB, PRO0883, PRO0903, PRO1341, DKFZp779N1935, GIG20,

GIG42, PRO1708, PRO2044, PRO2619, PRO2675, UNQ696, SA.

Description

Albumin is synthesized in the liver as preproalbumin which has an N-terminal peptide that is removed before the nascent protein is released from the rough endoplasmic reticulum. The product, proalbumin, is in turn cleaved in the Golgi vesicles to produce the secreted albumin. Albumin is a soluble, monomeric protein which comprises about one-half of the blood serum protein. Albumin functions primarily as a carrier protein for steroids, fatty acids, and thyroid hormones and plays a role in stabilizing extracellular fluid volume. Mutations in this gene on chromosome 4 result in various anomalous proteins. Albumin is a globular unglycosylated serum protein of molecular weight 65,000. The human albumin gene is 16,961 nucleotides long from the putative 'cap' site to the first poly (A) addition site. It is split into 15 exons which are symmetrically placed within the 3 domains that are thought to have arisen by triplication of a single primordial domain. HSA is widely used to stabilize blood volume generally from donors but the fear of contamination such as HIV & Hepatitis has enticed great interest in the recombinant form which is identical to the natural blood.

Human Serum Albumin contains 584 amino acid residues derived from the prototypical human serum

albumin sequence. Suitable for use in biochemical, excipient (an inert substance used as a diluent or vehicle for a drug), culture media and chromatographic applications.

Purity

Greater than 99.0% as determined by both:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Applications

Formulation of Protein Therapeutics
Cell Storage: Cryopreservation
Vaccine formulation and manufacturing
Development of mammalian cell cultures
Infertility treatments
Coating for medical devices
Drug delivery
In vivo diagnostics

Storage

Human Serum Albumin although stable at room temperature for 2 weeks should be stored at 4°C.

Formulation

0.25gr/ml solution containing no additives.