



## Product Datasheet

<b>Product Name</b>	Human Serum Albumin Recombinant - Mammalian derived
<b>Cata No</b>	CB500990
<b>Source</b>	<i>Mammalian Cell Line</i>
<b>Synonyms</b>	Serum albumin, ALB, PRO0883, PRO0903, PRO1341, DKFZp779N1935, GIG20, GIG42, PRO1708, PRO2044, PRO2619, PRO2675, UNQ696, SA, HSA.

### Description

Albumin is synthesized in the liver as prealbumin 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. Recombinant Human HSA produced in mammals is a single, glycosylated, polypeptide chain containing 585 amino acids and having a molecular mass of 66441 Dalton.

The HSA-m is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered yellowish liquid formulation.

### Purity

Greater than 98.% as determined by both:

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

### Formulation

50mM sodium phosphate, 1mM sodium chloride, pH-7: aseptically filtered (0.2µm).

### Stability

HSA should be stored between at temperatures below 30°C.

**NOTE: Do not freeze!**

### 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

**\* For Non-Clinical Research Use Only \***