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Product Specification Sheet

Product #: 800001

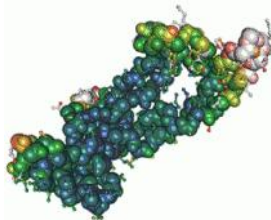
Version: 1.0
Revision Date: 28 Oct 2013

Human Serum Albumin, Recombinant

(rHSA)

99%+, Lyophilized Powder, Expressed in Rice

Description



rHSA Structure

Albumin is a soluble, 66 kDa, unglycosylated monomeric protein. It is the most abundant protein in human blood plasma and functions as a carrier protein for fatty acids, steroids, hormones, growth

factors and trace minerals. It also functions to buffer pH, stabilize proteins and membranes, promote cell growth, maintain oncotic pressure, scavenge toxins, protect from cellular damage, enhance metal delivery or serve as a hydrophobic moiety. Human serum albumin (HSA) is used clinically to restore blood volume but also has numerous research and pre-clinical development applications.

HSA is a common ingredient in cell media formulations and has been successfully used for growing and storing cultured cells. Applications include in vitro fertilization, stem cell and cell therapies. It also has utility as an excipient in pre-clinical drug formulations, protein or small molecule delivery, antibody development, vaccine manufacturing, wound sealants, medical device coating and nanoparticle delivery.

Produced using a novel technology platform, Aspira Scientific's recombinant HSA (rHSA) is a highly pure, non-glycosylated single polypeptide product. Derived from rice grains, it does not utilize human, animal or microorganism production systems. Thus, it is free of yeast, animal and human byproducts and devoid of associated risks including host-specific immunological response, contaminating adventitious virus or transmissible spongiform encephalopathies.

Aspira Scientific's rHSA is a highly pure product that has an identical amino acid sequence and conforms to the biophysical characteristics of human plasma-derived HSA (pHSA). It performs equally or better than pHSA and fetal bovine serum (FBS) to support cell growth and conditions.

Manufactured in an ISO 9001 certified facility with rigorous quality control procedures and superior batch-to-batch consistency, Aspira Scientific's rHSA is an ideal choice for diverse research applications. Furthermore, it complies with regulatory recommendations to use non-animal derived components for pharmaceutical related research and development.

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Product Characteristics

Production Organism:	<i>Oryza sativa</i>
Color:	off-white to light beige
Form:	powder, lyophilized
pH (100 mg/mL):	6.5 - 7.5
Solubility (100 mg/mL):	100%, clear, light to pale yellow

Composition

Albumin, human: (CAS 70024-90-7)	99%+ determined by ELISA assay, SDS-PAGE and RP-HPLC
Total Protein:	90% determined by BCA protein assay
Endotoxin:	0.5 EU/mg determined by gel-clot analysis

Use

Storage Temperature:	2 - 8 °C
Expiration:	See product label or Lot Certificate of Analysis
Recommended Reconstitution Concentration:	200 mg/mL in sterile water; store reconstituted product at -20 °C, avoid freeze-thaw cycles
Recommended Use Concentration:	0.5 - 2 g/L as a cell culture media supplement, however, the optimal concentration should be determined for the specific application

Safety and Handling Precautions

See MSDS for safe product handling information

For research use only.

This product has not been approved as a direct human therapeutic agent.

Manufactured by Healthgen Biotechnology Co., Ltd.

This product is produced in an ISO 9001:2008 certified manufacturing facility according to quality management system provisions and complies with local manufacturing GLP and GMP practices. This product is licensed under U.S. Patent No. 7,723,571 and corresponding Patent No. 1865064 in the European Union, Patent No. 4.680.237 in Japan and Patent Nos. ZL 2006 1 0019285.9 and ZL 20005 1 0019084.4 in China with patent pending in Canada.

By purchasing this product, the user agrees to a non-transferable right to use the product for internal research evaluation, excluding resale, repackaging or use for making or selling any commercial product or service without written approval of Aspira Scientific. This product is not intended for direct human use. Without separate, written agreement between the customer and Aspira Scientific, this document does not constitute a warranty.