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Technical Datasheet

Human Recombinant Serum Albumin

Cell Culture Tested

Product Code: CF001

Product Description:

Source: *Oryza Sativa*

Molecular Weight: ~66.55kDa

Synonym: Ovalbumin, Albumen

Human serum albumin (HSA) is the most abundant protein found in human blood plasma. It is synthesized in the liver. The functions of serum albumin include metabolism and transport of various nutrients such as amino acids, steroids, hormones, metals and other material such as drugs. It also helps in the maintenance of osmotic blood pressure. HSA is used as an important in cell culture medium supplement. It promotes cell growth, increases recombinant protein yield, provides mechanical protection for cells and binds and prevents import of toxin into cells. It also increases the viscosity of the medium.HSA can also be used as an additive for reduced-serum or serum-free culture media and in the cryopreservation of cells. The other applications of recombinant HSA includes use in electroporation, as blocking agents in immuno blots and ELISA. Recombinant human serum albumin is genetically engineered and derived from a rice-based expression system. IT is structurally equivalent to serum albumin and completely animal-, virus-, and bacteria-free. Moreover, it does not have batch to batch variation and thus provide better performance.

CF001 is recombinant of human serum albumin expressed in *Oryza Sativa,* filtered through 0.2 micron filter and lyophilized with no additives.

Directions:

1. Centrifuge the vial prior to opening.

   Note: Protein pellet may not be visible in the vial because protein is lyophilized without any carrier protein. As a result, small amount protein may get deposited on the inner walls of the vial during lyophilization in form of a thin and invisible film. aentrifugation causes deposition of any protein sticking to the cap or sides to settle at the vial bottom.

2. Surface sterilize using 70% isopropyl alcohol and take it into laminar air flow cabinet.

3. Aseptically reconstitute the lyophilized powder in sterile cell culture grade water to NLT 0.1 mg/ml concentration. *Note: Do not vortex.*

4. Upon reconstitution, it can be stored in a buffer containing a carrier protein and store in working aliquots. Refers the Storage and Shelf Life section for details. Avoid repeated freeze-thaw cycles.

Quality Control:

Appearance

Light yellow to white powder

Solubility

Soluble at NLT 0.1 mg/ml in cell culture grade water **Purity (by SDS-PAGE analysis)**

NLT 99%

Endotoxin Content

<0.125EU/mg

Storage and Shelf Life:

Recommended storage temperature: -20°C

Note: Store in cool, dry and well -ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.