

Synonym

Serum albumin,ALB,Alb

Source

Biotinylated domestic pig Serum Albumin, His,Avitag(DSA-D82E1) is expressed from human 293 cells (HEK293). It contains AA Arg 19 - Ala 607 (Accession # [A2THZ2-1](#)).

Predicted N-terminus: Arg 19

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 71.1 kDa. The protein migrates as 66-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

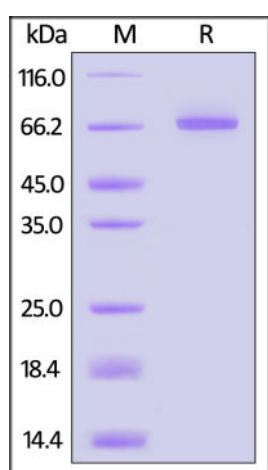
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

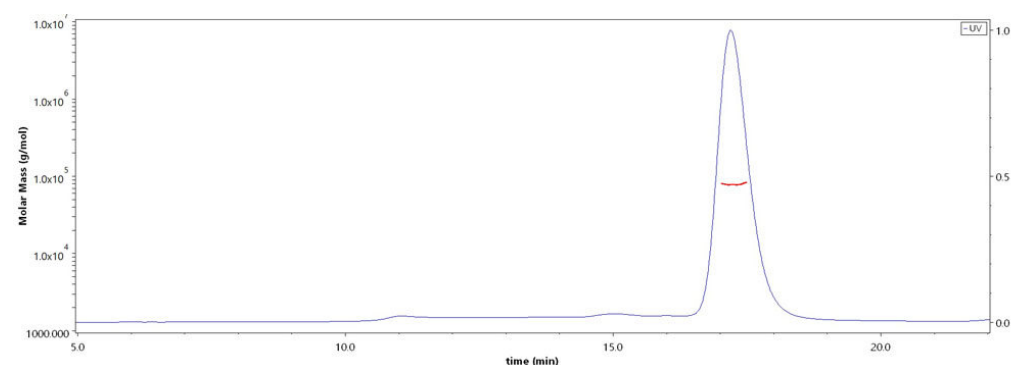
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated domestic pig Serum Albumin, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



The purity of Biotinylated domestic pig Serum Albumin, His,Avitag (Cat. No. DSA-D82E1) is more than 85% and the molecular weight of this protein is around 65-85 kDa verified by SEC-MALS.

[Report](#)

Background

serum albumin (SA) is also known as ALB, which is the main protein of plasma and has a good binding capacity for water, Ca²⁺, Na⁺, K⁺, fatty acids, hormones, bilirubin and drugs. The main function of SA is the regulation of the colloidal osmotic pressure of blood. As Major zinc transporter in plasma, SA typically binds about 80% of all plasma zinc. A variant structure of albumin could lead to increased binding of zinc resulting in an asymptomatic augmentation of zinc concentration in the blood. Defects in serum albumin can cause familial dysalbuminemic hyperthyroxinemia which is a form of euthyroid hyperthyroxinemia that is due to increased affinity of serum albumin for T₄. It is the most common cause of inherited euthyroid hyperthyroxinemia in Caucasian population.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.