Data Sheet (Cat.No.TMPK-00347)

TargetMol

Serum Albumin Protein, Human, Recombinant (His & Avi)

General Information

Synonyms:	Serum albumin;PRO0903;Albumin;PRO1341;ALB;ANALBA;FDAH;PRO0883
Protein Construction:	Asp25-Leu609
Species:	Human
Expression Host:	HEK293 Cells
Accession:	P02768-1
Molecular Weight:	69.4 kDa (predicted). Due to glycosylation, the protein migrates to 69-70 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Human Serum Albumin, His Tag immobilized on CM5 Chip can bind Human FcRn, His Tag with an affinity constant of 0.728 μM as determined in SPR assay.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Human serum albumin (HSA), the most prominent protein in plasma, binds different classes of ligands at multiple sites. HSA provides a depot for many compounds, affects pharmacokinetics of many drugs, holds some ligands in a strained orientation providing their metabolic modification, renders potential toxins harmless transporting them to disposal sites, accounts for most of the antioxidant capacity of human serum, and acts as a NO-carrier.

Reference

Ishima Y, Maruyama T. [Human Serum Albumin as Carrier in Drug Delivery Systems]. Yakugaku Zasshi. 2016;136 (1):39-47. Japanese. doi: 10.1248/yakushi.15-00227-PMID: 26725666.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481