

32-13383: HSA, Sf9

Alternative Name : Albumin, Cell Growth Inhibiting Protein 42, Growth-Inhibiting Protein 20, Albumin (32 AA), Albumin (AA 34), Serum Albumin, PRO0883, PRO0903, PRO1341, ANALBA, FDAH, HAS, ALB.

Description

Source: Sf9, Baculovirus cells.

Sterile filtered colorless solution.

Albumin is synthesized in the liver as preproalbumin 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.

HSA produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain (19-609 a.a.) and fused to a 6 aa His Tag at C-terminus containing a total of 597 amino acids and having a molecular mass of 68kDa. HSA shows multiple bands between 50-70kDa on SDS-PAGE, reducing conditions and purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 90.0% as determined by SDS-PAGE.

Content : HSA protein solution (0.5mg/ml) contains Phosphate buffered saline (pH7.4) and 10% glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Amino Acid : RGVFRRDAHK SEVAHRFKDL GEENFKALVL IAFAQYLQQC PFEDHVKLVN EVTEFAKTCV ADESAENC DK
SLHTLFGDKL CTVATLRETY GEMADCCAKQ EPERNECFLQ HKDDNPNLPR LVRPEVDVMC TAFHDNEETF
LKKYLYEIAR RHPYFYAPEL LFFAKRYKAA FTECCQAADK AACLLPKLDE LRDEGKASSA KQRLKCASLQ
KFGERAFAKAW AVARLSQRFP KAFAEVSKL VTDLTKVHTE CCHGDLLECA DDRADLAKYI CENQDSISSK
LKECCEKPLL EKSHCIAEVE NDEMPADLPS LAADFVESKD VCKNYAEAKD VFLGMFLY EYARRHPDYSVV
LLLRLAKTYE TTLEKCCAAA DPHECYAKVF DEFKPLVEEP QNLIKQNC ELFEQLGEYKFQ NALLVRYTKK
VPQVSTPTLV EVSRNLGKVG SKCCKHPEAK RMPCAEDYLS VVLNQLCVLH EKTPVSDRVT KCCTESLVNR
RPCFSALEVD ETYVPKEFNA ETFTFHADIC TLSEKERQIK KQTALVELVK HKPKATKEQL KAVMDDFAAF
VEKCKKADDK ETCFAEEGKK LVAASQAALG LHHHHHHH