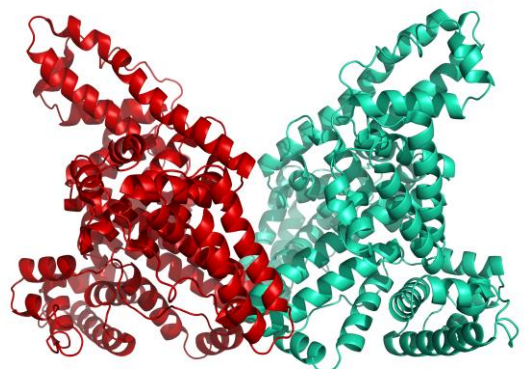


Product Information

Protein:	Human Serum Albumin, His-Tag (~ 69.9 kDa)
Uniprot#:	P02768
Sequence:	<pre>MRGVFRRDAHKSEVAHRFKDLGEEFKALVLIIFAQYLQQCPFEDHVKLVNEVTEFAKTC VADESAENCDKSLHTLFGDKLCTVATLRETYGEMADCCAKQEPERNECFLQHKDDNPMLP RLVRPEVDVMCTAFHDNEETFLKKYLYEIARRHPYFYAPELLFFAKRYKAAFTCCQAAD KAACLLPKLDLREDEGKASSAQRLKASLQKFGERAFKAWAVARLSQRFPKAEFAEVSK LVTDLTKVHTECCHGDLLECADDRADLAKYICENQDSISSKLEKCEKPLLEKSHCIAEV ENDEMPADLPSLAADFVESKDVCKNYAEAKDVFLGMFLYEYARRHPDYSVLLLLRLAKTY ETTLEKCAAADPHECYAKVFDEFKPLVEEPQNLKQNCLEFELGGEYKFNALLVRYTK KVPQVSTPTLVEVSRNLGKVGSKCKHPEAKRMPCAEDYLSVVLNQLCVLHEKTPVSDRV TKCCTESLVNRRPCFSALEVDETYVPKEFNAETFTFHADICTLSEKERQIKKQTALVELV KHKPKATKEQLKAVMDDFAAFVEKCKADDKETCFEEGKKLVAASQAALGL</pre> <p>Methionine at pos. 1 might be present due to cloning constraints, C-terminal His-tag not shown in sequence.</p>
Source:	Recombinantly expressed in HEK293.
Tag(s):	His-tag, C-terminal
Purification:	Purified by affinity chromatography and subsequent buffer exchange.
Formulation:	PBS; pH 7.4. Liquid, stored and shipped at -80 °C.
Purity:	> 90 % (will be determined by densitometry of Coomassie stained gel, example next page)
Concentration:	Will be determined by BCA-Assay.
Long-term storage:	No recommendations.

Background Information:

Human serum albumin (HSA) is a ubiquitous protein of the human blood plasma, constituting approximately half of the total protein content. Due to its exceptional ligand-binding capacity, HSA serves as multifunctional carrier protein, transporting various endogenous and exogenous ligands, including fatty acids, bilirubin, hormones, metal ions, and drugs. Its ability to bind these ligands with high affinity and specificity facilitates their distribution, metabolism, and elimination within the body. Additionally, HSA acts as scavenger of reactive oxygen species (ROS), thereby preventing oxidative damage to cells and tissues. Furthermore, HSA essentially contributes to the regulation of oncotic pressure to ensure fluid balance between the intravascular and interstitial compartments and to prevent edema. Its unique properties prove HSA useful in several clinical applications. HSA is commonly used as a plasma

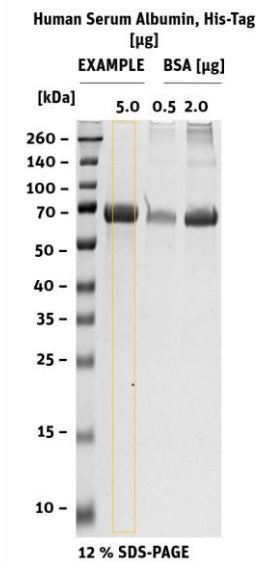


Structural model of Human Serum Albumin

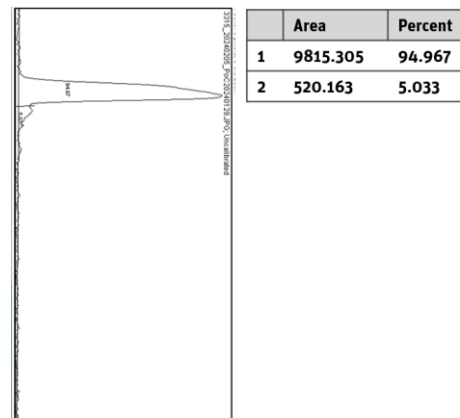
Product Information

expander to restore blood volume in patients with hypovolemia or shock. In addition, HSA-based solutions are employed in the formulation of pharmaceutical drugs to enhance their solubility, stability, and pharmacokinetic profiles. Moreover, HSA represents a valuable diagnostic marker used to assess liver function, nutritional status, and inflammatory conditions.

Quality Information (provided for each lot):



SDS-PAGE/Coll.Coomassie



Histogram (of marked lane in gel picture)