Mouse Serum Albumin, His-Tag

Cat. no. P2020-169



Product Information

Protein: Mouse Serum Albumin, His-Tag (~ 69.3 kDa)

Uniprot#: P07724

Sequence: MRGVFRREAHKSEIAHRYNDLGEQHFKGLVLIAFSQYLQKCSYDEHAKLVQEVTDFAKTC

VADESAANCDKSLHTLFGDKLCAIPNLRENYGELADCCTKQEPERNECFLQHKDDNPSLP PFERPEAEAMCTSFKENPTTFMGHYLHEVARRHPYFYAPELLYYAEQYNEILTQCCAEAD KESCLTPKLDGVKEKALVSSVRQRMKCSSMQKFGERAFKAWAVARLSQTFPNADFAEITK LATDLTKVNKECCHGDLLECADDRAELAKYMCENQATISSKLQTCCDKPLLKKAHCLSEV EHDTMPADLPAIAADFVEDQEVCKNYAEAKDVFLGTFLYEYSRRHPDYSVSLLLRLAKKY EATLEKCCAEANPPACYGTVLAEFQPLVEEPKNLVKTNCDLYEKLGEYGFQNAILVRYTQ KAPQVSTPTLVEAARNLGRVGTKCCTLPEDQRLPCVEDYLSAILNRVCLLHEKTPVSEHV TKCCSGSLVERRPCFSALTVDETYVPKEFKAETFTFHSDICTLPEKEKQIKKQTALAELV KHKPKATAEQLKTVMDDFAQFLDTCCKAADKDTCFSTEGPNLVTRCKDALA

Methionine at pos. 1 might be present due to cloning constraints, C-terminal His-tag

not shown in sequence.

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:

Mouse serum albumin (MSA) is a ubiquitous protein of the blood plasma in mice, constituting approximately half of the total protein content. Due to its exceptional ligand-binding capacity, MSA 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, elimination within the body. Additionally, MSA acts as scavenger of reactive oxygen species (ROS), thereby preventing oxidative damage to cells and tissues. Furthermore, MSA essentially contributes to the regulation of oncotic pressure to ensure fluid balance between the intravascular and interstitial compartments and to prevent edema. Alterations in MSA levels or function are associated with a range of clinical conditions, such as liver disease, kidney



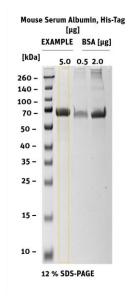
Structural model of Mouse Serum Albumin



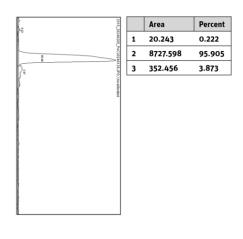
Product Information

dysfunction, malnutrition, and inflammation. In biomedical research, MSA serves as a valuable tool, used as a standard reference for various assays and experiments, including protein binding studies, drug delivery systems, and diagnostic assays.

Quality Information (provided for each lot):



SDS-PAGE/Coll.Coomassie



Histogram (of marked lane in gel picture)