Anti-Human Serum Albumin antibody, Mouse monoclonal
close HSA-11, purified from hybridoma cell culture

Product Description

Anti-Human Serum Albumin antibody, Mouse monoclonal (mouse IgG2a isotype) is derived from the HSA-11 hybridoma, produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mouse immunized with Human Serum Albumin (GeneID: 213). The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti-Human Serum Albumin specifically recognizes human albumin derived from sera, plasma or liver cells. The antibody shows reactivity with monkey, gibbon and baboon serum albumins. Monoclonal Anti-Human Serum Albumin shows no cross reaction with mouse (tested on Immunoblot), bovine, cat, chicken, goat, guinea pig, hamster, pigeon, rabbit, dog, sheep and pig or with chicken and turkey egg albumin. Weak reactivity is observed with horse and rat serum albumin. The antibody is recommended to use in ELISA, Immunoblotting (~70 kDa) and Immunohistochemistry. 1,3

Human Serum Albumin (HSA), the most prominent protein in human sera, is a monomeric multi-domain macromolecule, which is synthesized in the liver and is exported to body fluids, reaching a total concentration of about 60% of the total proteins in the blood serum. 4 Serum Albumin possesses an exceptional binding capacity for a wide range of endogenous and exogenous ligands and its abundance makes it an important determinant of the pharmacokinetic behavior of many drugs. 5 Human Serum Albumin also accounts for most of the antioxidant capacity of human serum, either directly or by binding and carrying radical scavengers and by sequestering transition metal ions with pro-oxidant activity. 6

Determination of serum albumin levels is a widely used screening test in clinical medicine. Changes in serum and urine albumin levels may indicate on a disease state such as cancer, malnutrition, cirrhosis, nephrotic syndrome, diabetes, gastrointestinal, pulmonary and hepatic diseases and thermal burns. 7 The availability of a Monoclonal Anti-Human Serum Albumin antibody could aid in the establishment of specific, reliable and cost-effective procedures for the determination of human serum albumin.

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Indirect ELISA: a working concentration of 0.2–0.4 µg/ml is recommended using 10 µg/ml human serum albumin for coating.

Immunoblotting: a working concentration of 2.5–5 ng/mL is recommended using human serum.

Note: In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

References