

Product Information

Monoclonal Anti-Albumin, clone HSA-11 produced in mouse, ascites fluid

Catalog Number **A6684**

Product Description

Monoclonal Anti-Albumin (mouse IgG2a isotype) is derived from the HSA-11 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from immunized BALB/c mice. Human serum albumin was used as the immunogen. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2.

Monoclonal Anti-Human Serum Albumin reacts specifically against denatured and reduced human albumin derived from serum or plasma immunoblotting assays. The antibody is specific for human serum albumin and cross-reacts with rhesus, gibbon and baboon serum albumins. The product shows no cross reaction with bovine, cat, chicken, dog, donkey, goat, guinea pig, hamster, marmoset, pig, pigeon, rabbit, rat, sheep, or turkey serum albumin or with chicken and turkey egg albumin. Weak cross-reaction is observed with horse serum albumin.

Albumin, the major protein produced by the liver, represents more than half the total protein in human serum. Many other body fluids also contain albumin. Three major functions of serum albumin have been proposed; maintenance of osmotic pressure, transportation of a variety of substances, and provision of an endogenous source of amino acids. The primary sites of albumin degradation are not known, but the protein may be metabolized by almost every organ of the body. Determination of serum albumin levels is a widely used screening test in clinical medicine.^{1,2} Changes in serum and urine albumin levels may indicate a disease state such as malnutrition, kwashiorkor, cirrhosis, nephrotic syndrome, diabetes, gastrointestinal and hepatic diseases, thermal burns and pulmonary diseases. The availability of a mono-specific antibody could aid in the establishment of specific, reliable and cost-effective procedures³ for the determination of human serum albumin in research and medicine.

Due to its specificity to human serum albumin, the antibody may also be used for the identification of human blood stains or other body fluids (e.g., seminal fluid, milk, urine, saliva, vaginal secretions) and tissue extracts as applied in diagnostic medicine and forensic serology.⁴

Monoclonal Anti-Albumin may be used for the identification of human serum albumin using various immunochemical assays such as ELISA, immunoblot, and immunohistochemistry.⁵

Reagents

Supplied as ascites fluid with 15 mM sodium azide as a preservative.

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, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Indirect ELISA : a minimum titer of 1:10,000 is determined using 10 µg/ml human serum albumin for coating of polyvinyl microtiter plates.

Immunoblotting: a minimum titer of 1:5,000 is determined using human serum.

Note: In order to obtain best results in different techniques and preparations, it is recommended that each individual user determine their optimum working dilutions by titration assay.

Note: It has been observed that human serum albumin is adsorbed most effectively on polyvinyl microtiter plates.

References

1. Waller, K. V., et al., *Clin. Chem.* **35**, 755 (1989).
2. Parving, H. H., et al., *Acta Endocrinol.*, **100**, 550 (1982).
3. Schwerer, B., et al., *Clin. Chim. Acta*, **163**, 237 (1987).
4. Herr, J., et al., in *Advances In Chemistry Series No. 220, Archeological Chemistry IV*, Allen, R. (ed.), pp 389, American Chemical Society (1989).
5. Moos, T., and Hoyer, P. E., *J. Histochem. Cytochem.*, **44**, 591 (1996).

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