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Product Information

Anti-Bovine Serum Albumin (BSA) antibody, Mouse monoclonal
clone BSA-33, purified from hybridoma cell culture

Product Number **SAB4200688**

Product Description

Anti-Bovine Serum Albumin (BSA) antibody, Mouse monoclonal (mouse IgG2a isotype) is derived from the BSA-33 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from mouse BALB/c mice immunized with Bovine Serum Albumin (BSA). 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.

Anti-Bovine Serum Albumin (BSA) antibody, Mouse monoclonal is specific for bovine serum albumin and is highly reactive with goat and sheep serum albumins. The product is less reactive with dog, turkey and horse serum albumins. Monoclonal Anti-BSA does not cross-react with human, rabbit, guinea pig, chicken, hamster, pig, mouse, cat, pigeon, rat or donkey serum albumins. The antibody may be used in various immunochemical techniques including Immunoblotting (~70kDa), Immunoprecipitation and Indirect ELISA. Detection of the BSA band by Immunoblotting is specifically inhibited.

Serum albumin, the most abundant protein (30–50 mg/mL) in the plasma, is a multifunctional non-glycosylated, negatively charged protein produced in the liver. It binds a wide variety of lipophilic compounds such as steroids and lipophilic hormones. Albumin functions include regulation of osmotic pressure in the blood and transport of fatty acids and other lipophilic compounds as well. Serum albumin has been reported as a valuable biomarker in diseases such as cancer, HIV, and additional diseases that require monitoring the glycemic control.[1-2]

Conversely, since serum albumin is the most abundant protein in the plasma/serum, it also acts as a blocking factor of serum analysis, and other downstream process analysis of less-abundant but possibly significant proteins. Hence, albumin depletion from the serum can enhance sample loading capacity in analytical methods and improve the detection sensitivity of low-abundant proteins.[1]

Reagent

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

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 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

Immunoblotting: a working concentration of 0.5-1 μg/mL is recommended using Fetal Bovine Serum.

Indirect ELISA: a working concentration of 0.03-0.075 μg/mL is recommended using 5 μg/mL BSA for coating.

Immunoprecipitation: a working amount of 1-2 μg is recommended using Fetal Bovine Serum.

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

References

1. Rajak, P., et al., *J. Pharm. Biomed. Anal.*, **78-79**, 154-60 (2013).
2. Baker, M.E., *J. Endocrinol.*, **175**, 121-7 (2002)

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