

Product Information

Monoclonal Anti-Protein A, Clone SPA-27

antibody produced in mouse, ascites fluid

Catalog Number **P2921**

Product Description

Monoclonal Anti-Protein A (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Protein A from Cowan I strain of *Staphylococcus aureus* 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-Protein A is specific for protein A in ELISA, precipitation methods (solution or agarose gel) immunoblotting and immunocytochemistry.¹ The antibody does not cross react with protein G.

Protein A is a 42 kDa single chain polypeptide isolated from the cell wall of *Staphylococcus aureus* Cowan I strain. Due to its affinity for the Fc region of many mammalian immunoglobulins, protein A is considered a universal reagent in biochemistry and immunology. It is used for different applications such as purification of immunoglobulins by affinity chromatography, cell surface studies, RIA, EIA, immunoprecipitations, and many other procedures. It can be used in these methods either in its native form or conjugated to various markers.

Polyclonal antibodies to protein A produced in rabbits, guinea pigs, chickens, and mice have, in addition to the Fab antigen binding sites specific for protein A, a significant non-immune Fc binding activity with protein A. Thus a monoclonal antibody to protein A of the mouse IgG1 isotype is advantageous due to the low non-specific binding of mouse IgG1 to protein A.

Reagent

The product is provided as ascites fluid with 0.1% 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

Store the product at -20°C . For continuous use, the product may be stored at $2-8^{\circ}\text{C}$ for up to one month. For extended storage, the solution may be frozen in working aliquots at -20°C . 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. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Monoclonal Anti-Protein A may be used for determination of purified native protein A of *Staphylococcus aureus*, and recombinant protein A produced in other species using various immunological methods. It can be used for the amplification of signals obtained by various protein A conjugates, e.g., Protein A-Gold conjugates in immunohistochemistry. Monoclonal anti-Protein A may be used for detection of nanogram quantities of protein A in sample foods or for evaluation of large scale protein A-agarose affinity columns used to purify monoclonal antibodies.

ELISA: a minimum working antibody dilution of 1:5,000 was determined using 10 $\mu\text{g}/\text{mL}$ of protein A to coat multiwell plates.

Note: In order to obtain best results, it is recommended that each individual user determine their optimal working dilution by titration assay.

References

1. Jasavala, R., et al., *Mol. Cell. Proteomics*, **6**, 252-271 (2007).

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