

Product Information

Anti-Avidin-FITC antibody, Mouse monoclonal clone WC19.10, purified from hybridoma cell culture

Product Number **F1269**

Product Description

Monoclonal Anti-Avidin (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified avidin was used as the immunogen. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The immunoglobulin fraction of ascites fluid is conjugated to fluorescein isothiocyanate (FITC) and then further purified to remove unconjugated FITC.

Avidin is a glycoprotein (68 kDa) composed of four identical polypeptide chains isolated from egg whites, which has a high binding affinity for the vitamin biotin. This strong interaction has been exploited in the design of immunoassays and immunohistologic staining techniques to serve as a basis for identifying antigen-antibody interactions.² While standard assay methods will suffice for most studies, there are occasions when enhanced sensitivity is needed to detect minute amounts of antigen or localize low densities of antigens in histologic sections. The FITC-Monoclonal Anti-Avidin conjugate enhances the sensitivity of avidin-biotin immunoassays by selectively enlarging the avidin-biotin complex, thereby increasing the signal. The product may also be used for applying the FITC ligand to a previously developed peroxidase avidin-biotin complex. The FITC-Monoclonal Anti-Avidin conjugate may be used in many applications where avidin can be introduced as a target label such as in immunochemical and DNA hybridization techniques.

Reagents

Supplied as a liquid in 0.01 M phosphate buffer, pH 8.0, containing 1% BSA and 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 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, the solution may be frozen 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

The antibody was screened specifically for its ability to bind to the intact avidin-biotin complex.¹ This specifically selected anti-avidin antibody binds an epitope distant to the biotin binding site and, therefore, the product enhances signals obtained in qualitative immuno-cytologic and immunohistologic staining procedures. The antibody reacts specifically with egg white avidin and ExtrAvidin® and does not recognize streptavidin in an ELISA or immunodot blot. FITC Conjugated Monoclonal Anti-Avidin may be used for the detection of avidin and the enhancement of signals obtained in avidin-biotin staining procedures.

Indirect immunohistology: a minimum dilution of 1:200 was determined using formalin-fixed, paraffin-embedded sections of human tonsils, biotin conjugated anti-human Ig, and Extravidin-Peroxidase.

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

References

1. Cassano, W., *J. Immunol. Meth.*, **117**, 169 (1989).
2. Wilchek, M., and Bayer, E., *Methods in Enzymol.*, **184**, 123 (1990).

ExtrAvidin is a registered trademark of Sigma-Aldrich Co. LLC.

DS,PHC,MAM 01/18-1