Product Information

3050 Spruce Street, Saint Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Monoclonal Anti-Biotin-Agarose
Clone BN-34
produced in mouse, purified immunoglobulin

Catalog Number **A1559**

Product Description

Monoclonal Anti-Biotin (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. A Biotin-KLH conjugate was used as the immunogen. The isotype is determined by a double diffusion assay using immunoglobulin and subclass specific antisera. The antibody is then purified by High Performance Affinity Chromatography (Protein A column). After purification, the antibody preparation is immobilized on cyanogen-bromide activated agarose at 2 mg antibody per resin volume.

Monoclonal Anti-Biotin recognizes the free biotin molecule and biotin conjugated to various biomolecules, such as proteins (immunoglobulins and enzymes), oligonucleotides, nucleic acids and other ligands. Immobilization of the antibody on agarose has no effect on the specificity of the antibody.

Biotin is an essential vitamin required by cells in living organisms or in culture. The high binding affinity to egg white or bacteria-derived avidin has been exploited in the design of immunoassays and immunohistologic staining techniques.[1] The high affinity of the avidin-biotin system may prevent rapid and easy purification of the biotinylated ligand.[2] Monoclonal Anti-Biotin-Agarose binds a biotinylated probe with affinity of a normal antigen-antibody reaction, thus enabling the release of captured biomolecules.

Reagents

Supplied as a 1:1 suspension in phosphate buffered saline, pH 7.4, containing 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.

Product Profile

One ml of Monoclonal Anti-Biotin-Agarose (packed resin) binds 0.15-0.3 µmol of biotin bound to a ligand.

Storage

Monoclonal Anti-Biotin Agarose may be regenerated and used for future adsorptions. Strip the agarose with ten column volumes of 0.1 M glycine, 0.15 M sodium chloride, pH 2.4, or 0.5 M acetic acid, 0.15 M sodium chloride, pH 2.4, then wash with 0.01 M sodium phosphate buffer, pH 7.2, containing 0.5 M sodium chloride (PB). Regenerated agarose may be stored at 2-8 °C as a suspension in PB containing preservative.

Do Not Freeze.

References

1. Wilchek, M., and Bayer, E.A., *Immunol. Today*, **5**, 39 (1984).
2. Gillam, I.C., *Trends Biotechnol.*, **5**, 332, (1987).

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