ProductInformation

ALBUMIN BOVINE, AGAROSE, AFFINITY MATRIX
Product Number **A3790**
Storage Temperature 2-8°C

Product Description
Matrix: Cross-linked 4% beaded agarose (Bead diameter: 45-165 microns)
Activation: Cyanogen bromide
Attachment: Primary amines of albumin
Spacer: 1 atom
Ligand immobilized: 10-15 mg/ml
Form: Suspension in 0.5 M NaCl containing 0.02% thimerosal

This product is produced by attaching cyanogen bromide activated agarose to the accessible epsilon amino groups of the lysine residues in bovine serum albumin.

This matrix can be used in a column or batchwise. Immediately after elution, the resin should be washed with a neutral buffer for storage. A solution of 0.5 to 2.0 M NaCl can be used to help remove tightly bound material from the resin.

Albumin agarose was reported to be useful in separating D and L-amino acids. L-Tryptophan was retained by the matrix in a borate buffer at pH 9.2, and could be eluted with 0.1 M acetic acid. At pH 6.5 there was a sufficient difference in retention between the D and L isomer to give complete baseline separation. By optimizing elution conditions, the albumin resin could also be used for the resolution of 5-hydroxy-D,L-tryptophan, D,L-kynurenine and 3-hydroxy-D,L-kynurenine.[1]

It has been reported that immobilized albumin could be used to remove from plasma a variety of substances which bind to albumin, such as bilirubin, thyroxine, taurolithocholic acid, chenodeoxycholic acid and digitoxin[2] as well as the heme peptide of cytochrome C.[3,4] Elution was accomplished with either 40% albumin or 50% ethanol in PBS.

The binding of bacterial lipoteichoic acid (LTA) to the fatty acid binding sites on albumin was investigated. The affinity of the binding of LTA to albumin allowed for the preparation of active LTA from extracts of *Streptococcus pyogenes* using an albumin resin. The bound LTA could be eluted with the use of 50% ethanol or 1% detergent solutions. Attempts to elute the bound LTA with 1.0 M NaCl or alanine (10 mg/ml) were unsuccessful.[5]

References

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5. Simpson, W.A. *et al.,* J. Biol. Chem., 255, 6092-6097 (1980).

rbg 4/21/99