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## Bio beads sm 2 manual

### Bio-beads sm-2. Bio beads manual. Bio beads sm2 manual.

Macro-Prep Methyl HIC Resin is a methacrylate-based, 50 µm bead used for protein, polypeptide, enzyme, and nucleic acid purification. Specifically designed for interresinte purification steps, it removes host-cell contaminants from partially purified targets. Its rigidity and unique surface chemistry make it suitable for high-throughput and high-recovery HIC operations. Macro-Prep t-Butyl HIC Resin is another methacrylate-based bead used for protein, polypeptide, enzyme, and nucleic acid purification. It's designed for interresinte purification steps that remove host-cell contaminants from partially purified targets. Due to its rigidity and unique surface chemistry, it's particularly suited for high-throughput and high-recovery HIC operations. Bio-Beads SM-2 Adsorbents are analytical grade, neutral macroporous polymeric beads used in hydrophobic interaction chromatography. They have a high surface area for adsorbing organics with MW < 2,000 from aqueous solutions. These beads can be used in aqueous solution and with solvents including alcohols, petroleum ether, diethyl ether, and hexane, or with solvent mixtures, without expansion or contraction of the beads. Bio-Beads SM Hydrophobic and Polar Interaction Adsorbents are a neutral, macroporous polymeric Analytical Grade adsorbent of high surface area, intended for laboratory use only. It's composed of large numbers of highly crosslinked microspheres with uniform pore sizes. This macroreticular structure gives it high surface area and uniform pore sizes. Table 1: Description of Bio-Beads SM Adsorbents Bio-Beads SM-2 Adsorbent Chemical nature: Polystyrene-divinyl-benzene Polarity: Nonpolar Dipole moment: 0.3 Debye This adsorbent has been used to separate water-soluble steroids, phenols, drugs, pesticides, trace organics, and rhodamine. **\*\*Introduction\*\*** BioBeads SM adsorbents are a type of neutral, macroporous polymeric adsorbent designed for laboratory use only. These adsorbents have a high surface area and uniform pore sizes due to their macroreticular structure. They can be used with various solvents, including alcohols, petroleum ether, diethyl ether, hexane, and solvent mixtures, as well as aqueous media. **\*\*Section 3: Instructions for Use\*\*** To use BioBeads SM adsorbents, follow the batch method: 1. Weigh 5 g of BioBeads SM adsorbent per 25 ml of solution. 2. Add the adsorbent to the solution. 3. Mix the solution at room temperature using a stir bar or mechanical agitator for 2 hours. **\*\*Regeneration\*\*** The column can be regenerated by washing with methanol and then rinsing with distilled water. **\*\*Section 5: Storage\*\*** BioBeads SM adsorbents are stable for 5 years when stored at room temperature in an unopened container. **\*\*References\*\*** Various scientific studies and articles were cited, including: 1. Gibson et al., J. Biol. Chem. 2. Warner, J. Biol. Chem. 3. Bruch et al., J. Biol. Chem. 4. Shackleton et al., Clin. Chim. Acta 5. Bradlow et al., Proc. Nat. Sci. Counc. ROC (B) 6. Wigilius et al., J. Chromatog. 7. Deshmukh et al., Indian Chem. Eng. 8. Libbey, Analyst SM adsorbents are bulk packages available for purchase. The product description outlines the uses and characteristics of these adsorbents. Specifically, Bio-Beads SM-2 non-polar polystyrene adsorbents are useful for removing non-polar substances or surface active agents from aqueous solutions. A column method is described in detail for removing Triton X-100 detergent using Bio-Beads SM-2 adsorbent. Various protocols for sample preparation, including detergent removal and adsorption of unconjugated fluorescent dye, are also provided. Storage instructions for the adsorbents, references to previous studies, assistance information, product details, and other general applications of Bio-Beads adsorbents are included in the document. The table lists various compounds that have been concentrated or separated using these adsorbents. 1. Add TritonX-100 detergent weighing 0.07 g to the protein solution. 2. Apply a 1 ml sample of protein solution on top of the adsorbent layer. 3. Weigh 5 g of Bio-Beads SM adsorbent for every 25 ml of solution and mix thoroughly in water at room temperature for 2 hours using either a stir bar or mechanical agitator. 1. Prepare a 0.8 x 4 cm Poly-Prep column and fill it with 1 ml of Bio-Beads adsorbent. 2. Add 1-2 ml of solution containing the fluorescent-labeled antibody and collect the flow-through fraction. 3. Wash the column with PBS and collect the effluent. 4. Continue washing with 10 mM phosphate buffer at a rate of 0.03 ml/min. 5. Collect fractions and analyze for protein content. The Bio-Beads SM-2 adsorbent can be used to adsorb fluorescent dyes by pre-washing it with methanol, distilled water, and PBS before use. 6. For batch protocols, add 0.1 g of Bio-Beads adsorbent to a solution containing the fluorescent-labeled antibody. 7. Use Bio-Beads SM-2 adsorbents for various applications, including removal of detergents, organics, and biological metabolites from aqueous solutions. 8. The beads can be used in different solvents without expanding or contracting, with a density of 1.02 g/ml and a pore size of 90 Å. 9. These beads are useful for cleaning up drugs, pesticides, and other contaminants from plasma and urine, as well as extracting dyes and mycotoxins from food products.