

Waters

Lab Highlights

LAH 0242 5/85
AN/LS/MD/PR/OT

SEPARATION OF PROTEINS AND PEPTIDES ON μ BONDAPAK™ C₁₈

PART I

The recent extensive use of μ BONDAPAK™ C₁₈ columns for the separation of proteins and peptides results from the excellent versatility, selectivity, and reproducibility of the packing material. The selective literature references contained in this Lab Highlight refer to numerous protein and peptide separations which were accomplished using a μ BONDAPAK™ C₁₈ column. Other literature references and chromatograms are contained in LAH 0243 and LAH 0244.

1. "The Amino Acid Sequence of Elongation Factor TU of E. Coli - The Large CN Peptides," L'Italien, J. J. and Laursen, R. A., J. Biol. Chem. 256 (15) (1981) 8098-8101.
2. "Further Experiments in the Separation of Globin Chains by High Performance Liquid Chromatography," Shelton, J. B., Shelton, J. R., and Schroeder, W. A., J. Liq. Chromatogr. 4 (1981) 1381.
3. "A Silent, Neutral Substitution Detected by Reverse-Phase High-Performance Liquid Chromatography: Hemoglobin Beirut," Strahler, J. R., Rosenbloom, B. B., Hanash, S. M., Science 221 (1983) 860-862.
4. "Analysis of Endo-B-N-Acetylglucosaminidase Activity by HPLC on a Silica-Based, Chemically Bonded Octadecyl Column," Iwase, H., et al., Anal. Biochem. 113 (1981) 93-95.
5. "The Synthesis of Locust Adipokinetic Hormone," Bromfield, C. and Hardy, P. M., Tet. Letters 25 (1977) 2201-2204.
6. "Assay of Bovine Fibrinopeptides by HPLC," Martinelli, R. A. and Scheraga, H. A., Anal. Biochem. 96 (1979) 246-249.
7. "A Rapid HPLC Purification Method of Iodinated Polypeptide Hormones," Corval, D. P., et al., Anal. Biochem. 109 (1980) 185-191.
8. "Improved Separation of Glycosylated Tryptic Peptides by RP-HPLC," Compans, R. W. and Basak, S., HRC and CC 4 (1981) 302-304.
9. "¹²⁵I-Labeled Peptide Mapping and HPLC ¹²⁵I-Peptide Separation of Protein I for Four Strains of Neisseria Gonorrhea," Judd, R. C., J. Liq. Chromatogr. 6(8) (1983) 1421-1439.
10. "Pentapeptide (Proctolin) Associated with an Identified Neuron," O'Shea, M. and Adams, M. E., Science 213 (1981) 567-569.

11. "Characterization of β -Endorphin Immunoreactive Peptides in Rat Pituitary and Brain by Coupled Gel and RP-HPLC," Dennis, M., et al., J. Chromatogr. 266 (1983) 163-172.
12. "Separation of Myelin Basic Protein Peptide 43-88 and Its Fragments by Analytical and Preparative HPLC," Whitaker, J. N., et al., J. Chromatogr. 254 (1983) 211-218.
13. "HPLC Identification of Enkephalin-Like Peptides in the Cochlea," Hoffman, D. W., et al., Hearing Research 9 (1983) 71-78.
14. "A Rapid Isolation of Human Chorionic Gonadotropin and Its Subunits by Reversed-Phase HPLC," Putterman, G. J., J. Liq. Chromatogr. 5(4) (1982) 715-729.
15. "Histone Fractionation by HPLC," Gurley, L. W., et al., Anal. Biochem. 129 (1983) 132-144.
16. "Separation and Assignment of the Tryptic Peptides of Human Growth Hormone and the 20K Dalton hGH Variant by RP-HPLC," Hearn, M. T. W., et al., J. Liq. Chromatogr., 6(2) (1983) 215-228.
17. "Detection of HB-Papio B, A Silent Mutation of the Baboon β -Chain, by HPLC," Shelton, J. B., et al., Hemoglobin 6(5) (1982) 451-464.
18. "Semi-Preparative HPLC Purification of A 28-Amino Acid Synthetic Parathyroid Hormone Antagonist," Tyler, G. A. and Rosenblatt, M., J. Chromatogr. 266 (1983) 313-318.
19. "Purification by Reversed-Phase HPLC of an Epidermal Growth Factor-Dependent Transforming Growth Factor," Anzono, M. A., et al., Anal. Biochem. 125 (1982) 217-224.
20. "Substrate Specificity of the Enzyme Tonin: Cleavage of Substance P," Lee C. M., et al., FEBS Letters 113(2) (1980) 173-176.
21. "Use of HPLC to Quantitate Thymine-Containing Pyrimidine Dimers in DNA," Friedberg, E. C. and Love, J. D., J. Chromatogr. 240 (1982) 475-487.
22. "Purification and Primary Structure of a Polypeptide with Multiplication Stimulating Activity from Rat Liver Cell Cultures," Marquardt, H., et al., J. Biol. Chem. 256(13) (1981) 6859-6865.
23. "Reversed-Phase LC Purification of Subunits Oligomeric Membrane Proteins," Poyton, R. O., et al., J. Chromatogr., 266, 585-598 (1983).