

APPLICATION NEWS

MacroSep BIO C4 HPLC Columns

ES Industries has developed a line of wide pore columns to provide the bioanalytical chromatographer with a highly efficient state-of-the-art base deactivated wide pore HPLC column. The MacroSep BIO line is based upon ultra-high purity metal free silica containing highly controlled pores of 300Å diameter. This column technology is a superior tool for the analysis of proteins, peptides and other biomolecules.

MacroSep BIO C4 consists of butyl aliphatic groups bonded to the surface of 300Å pore diameter ultra-high purity silica. MacroSep BIO C4 can be used to separate glycoproteins, peptides, hemoglobin variants, human growth hormone and membrane proteins. A peptide chromatogram separated on MacroSep BIO C4 is shown below.

All of the MacroSep BIO phases undergo extensive QC testing to ensure consistent column to column performance. Tightly controlled pore size and particle size distribution lead to extremely

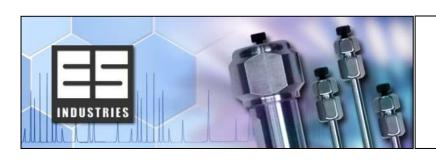
durable columns with low back lifetimes. Our ultra-high purity silica to ensure that it remains free from contamination through the entire process. All columns are strict QC requirements using test protocols designed by bioanalytical

MacroSep®		
Peptides		
Column:		
	5u 15cm X 4.6m	ım
Flow Rate:	1 mL/min	
Temperature:	23°C	
Mobile phase Program:	A - 0.1% TFA	
	B - 90/10 CH3CN/H2O, 0.1% TFA	
Time(min)	%A	%B
0	75	25
20	50	50
25	75	25
Detection:	UV -210nm x 1.0AUF	
Injection Volume:	20uL	
Sample:	1. Bradykinin	

Leucine Enkephalin
 Renin Substrate
 Tetradecapentide

4. Insulin5. Insulin chain B

pressure and long is carefully analyzed any metal manufacturing manufactured under procedures and chromatographers.



APPLICATION NEWS

MacroSep BIO C4 **HPLC Columns**

MacroSep BIO C	24 3micron 300A	PEEK™ Hardware
50 X 4.6mm	115131-MSP-C4	BC15131-MSP-C4
100 X 4.6mm	125131-MSP-C4	BC25131-MSP-C4
150 X 4.6mm	135131-MSP-C4	BC35131-MSP-C4
MacroSep BIO C	24 5micron 300A	PEEK™ Hardware
MacroSep BIO C 50 X 4.6mm	24 5micron 300A 115231-MSP-C4	PEEK™ Hardware BC15231-MSP-C4
50 X 4.6mm	115231-MSP-C4	BC15231-MSP-C4

