

HPLC, LC/MS Columns

Bio LC Column

ProteoSil / MonoSelect



Introduction

GL Sciences offers specialized Bio LC Columns tailored for HPLC applications in biomolecule analysis, including proteomics and the separation of proteins and peptides.

These columns come equipped with bio-inert PEEK and stainless steel hardware. The ProteoSil HPLC columns are notable for their precisely controlled pore sizes within the packing material, which is especially advantageous for biopharmaceutical analysis.

In particular, the 200Å pore size is fine-tuned for analyzing compounds with molecular weights from a few kDa to several tens of kDa, ensuring peak performance.

Additionally, the minimal variation between lots and the consistent quality of these columns make them perfectly suited for LC/MS applications.

ProteoSil 300-C18
ProteoSil 300-C8
ProteoSil 200-C18
ProteoSil 100-C18
ProteoSil 300-C4
ProteoSil HILIC
ProteoSil 300-SEC
ProteoSil 100-SEC
MonoSelect RP-mAb
MonoSelect nPEC

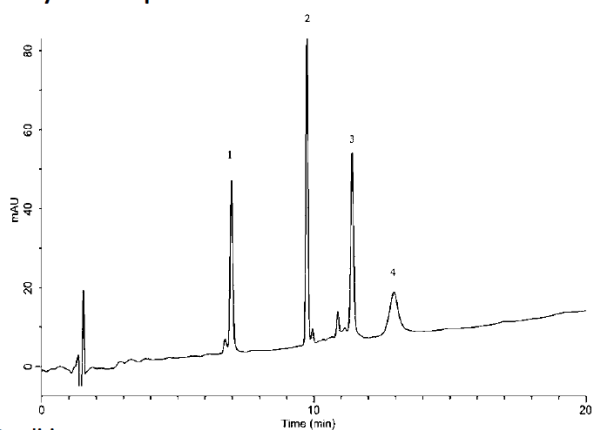


Column Specifications and Target Compounds

	Target	MW	Column	Phase	Particle size (um)	Pore size (Å)
Reversed Phase (RP)	Proteins/Peptides Oligonucleotides/ Nucleic Acids	<5,000	ProteoSil 100-C18	C18	1.9, 3, 5	100
		5,000 - 20,000	ProteoSil 200-C18	C18	1.9, 3, 5	200
			ProteoSil 200-C8	C8	1.9, 3, 5	200
		>20,000	ProteoSil 300-C18	C18	5	300
	ProteoSil 300-C8		C8	5	300	
	Proteins/Peptides Monoclonal Antibodies Oligonucleotides/ Nucleic Acids	>20,000	ProteoSil 300-C4	C4	5	300
	Proteins, Monoclonal Antibodies Antibody-Drug Conjugate(ADC) Sub-unit	>100,000	MonoSelect RP-mAb	Phenyl	Monolith	600
HILIC	Proteins/Peptides Monoclonal Antibodies		ProteoSil HILIC	Amide	1.9, 3, 5	100
SEC	Proteins/Peptides Monoclonal Antibodies Oligonucleotides/ Nucleic Acids	5,000 - 600,000	ProteoSil 300-SEC	DIOL	5	300
		<5,000	ProteoSil 100-SEC	DIOL	5	100
SEC + RP	Liposome, Exosome	-	MonoSelect nPEC	Hydrophilic Polymer	Monolith	110

Applications

Analysis of Peptides and Proteins



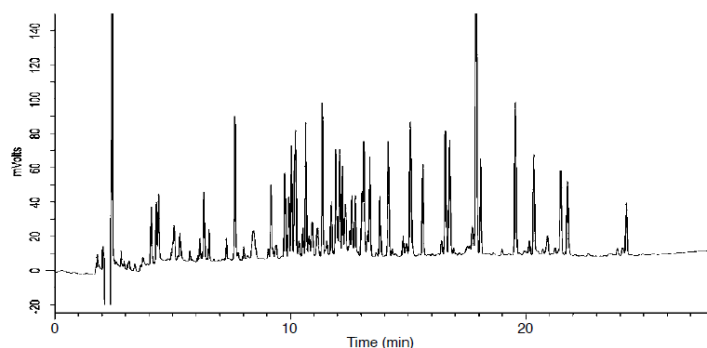
Conditions

Column : ProteoSil 200-C8 (5 µm, 150 x 4.6 mm I.D.)
 Eluent : A) 0.1% TFA in CH₃CN
 B) 0.1% TFA in H₂O
 A/B = 20/80 – 20 min – 55/45, v/v
 Flow Rate : 1.5 mL/min
 Col. Temp. : 40 °C
 Detection : UV 220 nm
 Injection Vol. : 5 µL

Analyte

1. Ribonuclease A (0.2 mg/mL)
 2. Insulin (0.2 mg/mL)
 3. Lysozyme (0.2 mg/mL)
 4. BSA (0.2 mg/mL)

Analysis of BSA Digests



Conditions


Column : ProteoSil 200-C18 (1.9 µm, 150 x 2.1 mm I.D.)
 Eluent : A) 0.1% TFA in CH₃CN
 B) 0.1% TFA in H₂O
 A/B = 10/90 - 30 min - 50/50 - 0.1 min - 90/10
 - 5 min - 90/10 - 0.1 min - 10/90 - 15 min
 Flow Rate : 0.2 mL/min
 Col. Temp. : 40 °C
 Detection : UV 210 nm
 Injection Vol. : 10 µL

Analyte

Tryptic Digest of BSA (0.5 mg/mL)

 **GL Sciences** glsciences.com



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