

Eprogen's MICRA HPLC columns are designed and manufactured for the analysis and purification of proteins, peptides, polymers, basic and acidic molecules, as well as pharmaceutical compounds.

MICRA HPLC columns are individually tested to ensure premium quality and are based on pure, highly spherical, porous and non-porous silica supports. These columns utilize the classic SynChropak® bonding chemistries to deliver excellent resolution, stability, and reproducibility. Column sizes include 1-30 mm I.D. and 50-300 mm in length. Particle sizes are available in 1.5 to 10 μ and pore sizes range from 50-4000 Å.

Featured Columns:

(300 X 7.8 mm I.D.)
MICRA-Gold GPC300
Order No. SPCG103-30

(250 X 4.6 mm I.D.)
MICRA-Gold GPC PEPTIDE
Order No. CGPEP-25

MICRA-Gold GPC100
Order No. CG101-25

MICRA-Gold GPC300
Order No. CG103-25

MICRA-Gold GPC1000
Order No. CG110-25

MICRA-Gold GPC4000
Order No. CG140-25

MICRA-Gold GPC

- Available in Six Pore Diameters
- Neutral Carbohydrate Bonded Phase
- Separates Peptides, Proteins, and Polymers
- Compatible with Aqueous (pH 2-8) and Organic Solvents
- Maintains Biological Activity

The principles of size exclusion chromatography place limitations on the operational variables such as flowrate, sample volume and sample size that can be used to achieve maximum resolution. The optimum MICRA-Gold GPC column can be chosen using the guidelines in the chart to the right.

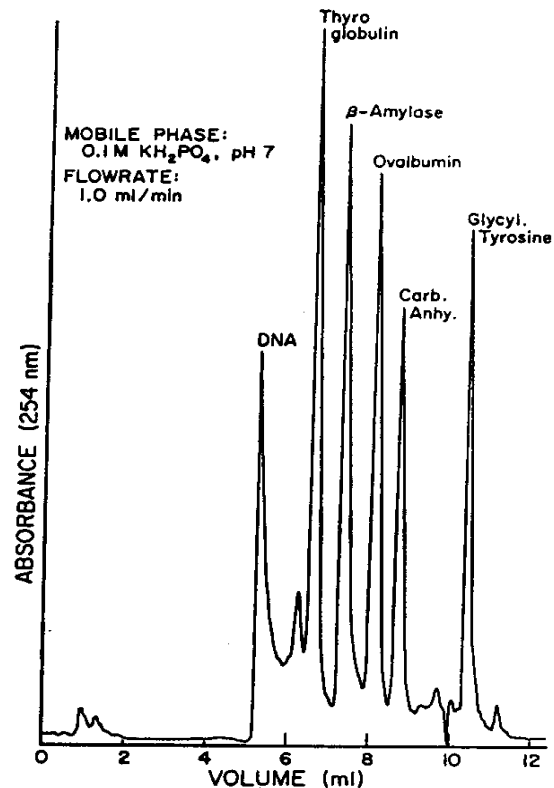
Rapid Analysis of Biopolymers

Size Exclusion HPLC using MICRA-Gold GPC Columns

SynChropak® Bonding Chemistries

MICRA-Gold GPC300, 300 X 7.8 mm I.D.

Proteins



Maximal Operational Limits for Optimal Resolution

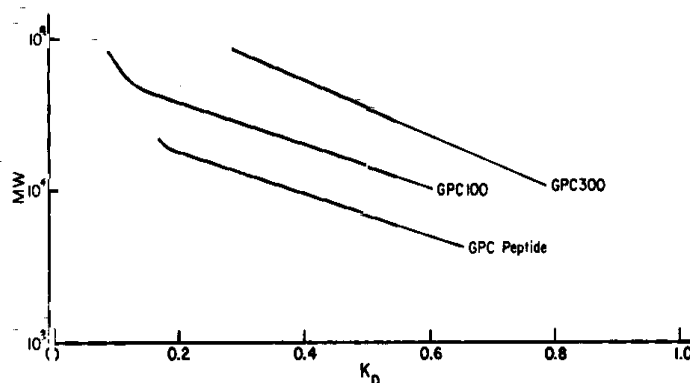
Column I.D. (mm)	Maxium Flowrate (ml/min)	Sample Volume (ml)	Sample Mass
2.1	0.1	2	50-100 μ g
4.6	0.5	8	200-400 μ g
7.8	1.5	30	1-2 mg
10	2	50	2-4 mg
21.2	8	200	8-16 mg

MICRA-Gold GPC: Neutral and Anionic polymer analysis

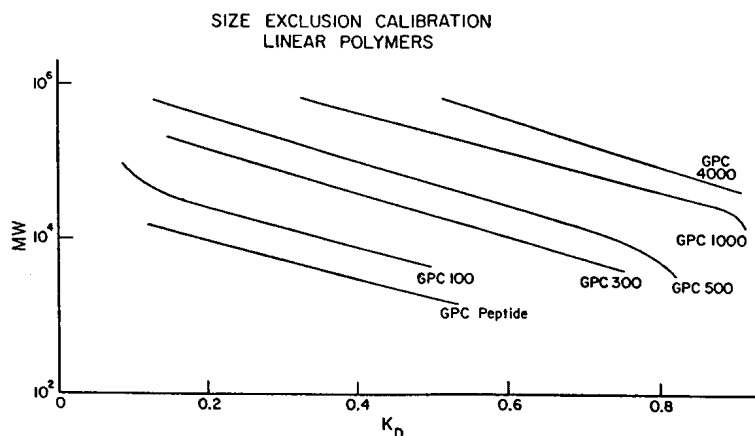
- Proteins
- Enzymes
- Nucleic Acids
- Carbohydrates
- SDS Proteins
- Synthetic Polymers

The MICRA-Gold GPC line contains products with six pore diameters ranging from 50Å to 4000Å, allowing analysis of solutes with molecular weights from 10^3 to 10^7 . The glycerol bonded phase offers minimal interaction with anionic and neutral water-soluble polymers. The MICRA-Gold GPC LINEAR support has a mixed pore distribution to allow analysis of samples with a broad range of molecular weights. Its molecular weight distribution corresponds to those of GPC1000 and GPC100.

Calibration Curve - Proteins



Calibration Curve - Sulfonated Polystyrenes



GPC Column Selection Molecular Weight Range (Kd = 0.2 - 0.8)

Globular Molecules Proteins	Recommended Column	Linear Molecules Organic Polymers Denatured Proteins
$8.0 \times 10^2 - 3.5 \times 10^4$	GPC Peptide	$5.0 \times 10^2 - 1.0 \times 10^4$
$5.0 \times 10^3 - 1.6 \times 10^5$	GPC 100	$5.0 \times 10^2 - 2.5 \times 10^4$
$1.0 \times 10^4 - 1.0 \times 10^6$	GPC 300	$1.0 \times 10^3 - 1.0 \times 10^5$
$4.0 \times 10^4 - 2.0 \times 10^6$	GPC 500	$1.0 \times 10^4 - 3.5 \times 10^5$
$4.0 \times 10^5 - 1.0 \times 10^7$	GPC 1000	$4.0 \times 10^4 - 1.0 \times 10^6$
	GPC 4000	$7.0 \times 10^4 - 1.0 \times 10^7$
	GPC LINEAR	$1.0 \times 10^3 - 1.0 \times 10^6$

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