

Product information

Produktinformation

1.10317 Fractogel[®] EMD BioSEC (S)

Size exclusion chromatography

Fractogel[®] EMD BioSEC is a cross-linked polymethacrylate resin for size exclusion chromatography. Using the tentacle modification linear polymer chains were grafted to the inner surface resulting in pores of appropriate inner diameters for protein separation with increased resolution.

The method, also known as gelfiltration or molecular-sieve chromatography is based on the different size and shape of proteins. Proteins of different size penetrate into the internal pores of the beads to different degrees. Small protein molecules are retarded by the column while large molecules pass through, more rapidly.

SEC is a very gentle, non-adsorptive technique that can be performed without any restriction concerning the buffer system. However, the chromatography buffer should contain 0.1 to 0.3 M NaCl to avoid non specific interactions.

Properties of the tentacle size exclusion sorbent

Cat. No.	1.10317
Bulk material	150 ml, 250 ml, 1 l, 5l
Particle size	20 – 40 µm
Fractionation range	5 x 10 ³ to 1 x 10 ⁶ Da
Type of chromatography	Size exclusion
pH stability range	pH 1 up to pH 12
Elution conditions	Isocratic, any commonly used buffer system, 0.1 – 0.3 M NaCl
Pressure limit	8 bar
Recommended column size	i.d. ≥ 16 mm, length 500 to 900 mm
Operating temperature	4 °C to room temperature
Storage, preservative	20 % ethanol, 150 mmol/l NaCl
Sanitization	0.1 – 1 M NaOH, 1 M HCl, sodium lauroyl sarcosinate, autoclaving
Linear flow rate	Up to 100 cm/h