

# Product information

## Produktinformation

---

## 1.10085 Fractogel<sup>®</sup> EMD Propyl (S)

### Hydrophobic interaction chromatography (HIC)

Fractogel<sup>®</sup> EMD Propyl is a cross-linked polymethacrylate resin for hydrophobic interaction chromatography modified according to the tentacle technology. The beads have a high mechanical and chemical stability. Fractogel<sup>®</sup> EMD hydrophobic media are functionalised on the surface with hydrophobic groups which are bonded via linear polymer chains. These enable the hydrophobic groups to adapt a configuration that is optimal for their interaction with the analyte.

Fractogel<sup>®</sup> EMD Propyl is a weak hydrophobic chromatography support for purification of proteins and antibodies.

The binding of the proteins is performed at high salt concentrations. Buffers commonly used contain  $(\text{NH}_4)_2\text{SO}_4$ ,  $\text{Na}_2\text{SO}_4$ ,  $\text{K}_2\text{SO}_4$  or  $\text{Na}_2\text{HPO}_4$ .

The strength of the binding depends on:

- concentration of the salt
- salting out properties of the salt with respect to individual proteins
- pH value of the buffer which affects the solubility of many proteins
- temperature (increasing temperature results in stronger hydrophobic interactions → stronger binding)

### Properties of the weak tentacle hydrophobic interaction sorbent

|                          |   |
|--------------------------|---|
| Cat. No.                 | 1.10085                                       |
| Bulk material            | 100 ml, 500 ml (larger quantities on request) |
| Particle size            | 20 – 40 µm                                    |
| Type of chromatography   | Weak hydrophobic interaction chromatography   |
| Functional group         | Propyl  |
| Ligand density           | 20 – 40 µmol/ml                               |
| Protein binding capacity | about 35 mg ovalbumin/ml of gel               |
| pH stability range       | pH 2 up to pH 12                              |
| Elution conditions       | Decrease of salt concentration                |
| Pressure limit           | 20 bar  |
| Operating temperature    | 4 °C to room temperature                      |
| Storage, preservative    | 20 % ethanol                                  |
| Regeneration             | 20 % 2-propanol, 50 % ethylene glycol, urea   |
| Sanitization             | 0.1 – 0.5 M NaOH                              |
| Linear flow rate         | Up to 300 cm/h                                |