Size Exclusion Chromatography (SEC)

PolyHYDROXYETHYL A™ can be used for SEC from the largest proteins to amino acids. It is noteworthy for the dramatic shift in fractionation range with a mildly denaturing mobile phase such as 50 mM formic acid.



The chaotrope in the mobile phase disrupts the hydrogen bonding between the polymer chains in the coating, increasing their steric radius and making the space between them permeable. This permits the fractionation of solutes as small as dipeptides and amino acids.



Our columns have been used to assess the size of the small peptides present in commercial **protein hydrolyzates** as well as the products from **proteasome** digestion.

Our columns work well with proteins.



Flow rate and column size: Optimum resolution is obtained with a 200x9.4-mm column at a flow rate around 0.5-0.6 ml/min. Since most HPLC systems can deliver such flow rates reliably, this is our most popular size SEC column. Optimum resolution with a 200x4.6-mm column would be obtained with a flow rate of 130-140 μ l/min. Make sure that your HPLC system can deliver such flow rates reliably, and minimize dead volume in the connections and detector flow cell (use a microbore-scale cell).