L-column ODS-P

Wide pore C18 column for analysis of protein and peptide

Average particle size	5 µm
Average pore size	300 Å
Range of pH	pH 2–9
USP category	L1

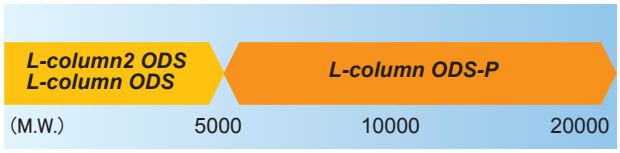
L-column ODS-P is ideal for the analysis of proteins and peptides. The base silica has a pore diameter of 300 Å. Adsorption is minimized and proteins and peptides elute with sharp peaks. Biological samples are often analyzed using 1 % TFA in the mobile phase and ***L-column ODS-P*** is exceptionally stable in strongly acidic mobile phase.

■ Role of Pore diameter in protein and peptide analysis

Insulin B chain with a molecular weight of 3495 does not show different peak shape between 120 Å pore diameter and 300 Å pore diameter (Fig. 19). Retention is determined by carbon load. On the other hand, myoglobin with a molecular weight of 17400 shows a broad peak when analyzed on the 120 Å ***L-column ODS*** and the main component is not separated from the impurities. Using 300 Å ***L-column ODS-P*** with 300 Å pore diameter, the main component is separated from the impurities with good peak shape. Analytes of molecular weight of approximately 5000 to 20000 are suitable for this column.

■ High durability

L-column ODS-P can be used in a pH range from 2 to 9. It demonstrates long lifetimes and stable performance in mobile phases containing 1 % TFA (Fig. 20).



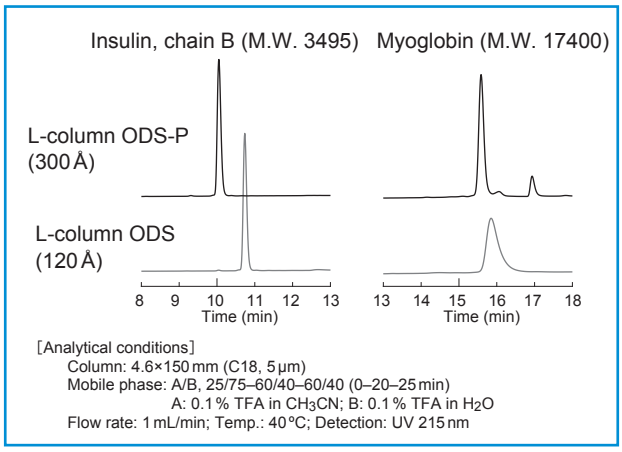


Fig. 19 Peptide and protein analysis using packing materials with different pore diameters.

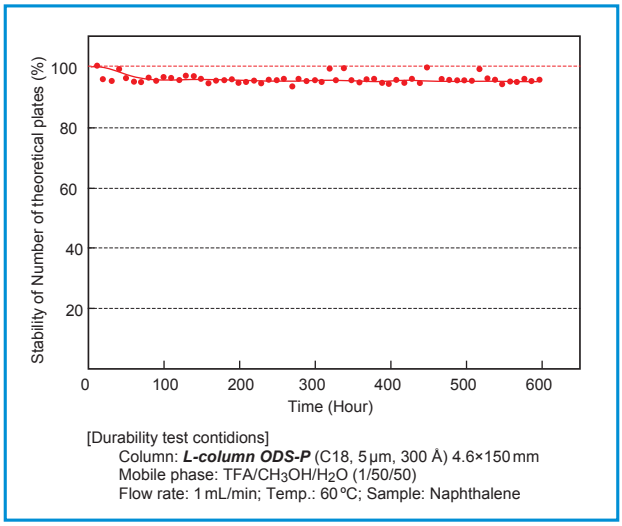


Fig. 20 Durability test with acidic mobile phase.