

CAPCELL PAK CR -Atlas-

CAPCELL PAK CR columns are made by mixing CAPCELL PAK C₁₈ and CAPCELL PAK SCX together in three different ratios. They are intended to elute basic compounds with a certain level of hydrophobicity under a mobile phase with a higher organic content than that for C₁₈ phases, for obtaining a higher sensitivity in LC-MS, or simply to obtain an altered separation selectivity.

CAPCELL PAK C₁₈, CAPCELL PAK SCX, and three types of CAPCELL PAK CR columns were compared in the separations of ten typical basic compounds. The figures below show structure, pKa value, and changes in retention time and selectivity under different mobile phases, for each compound. While CR 1:50 and CR 1:20 generally show selectivity close to those of C₁₈, CR 1:4 has selectivity totally different from those of C₁₈ and SCX. It is advised to utilize the results for method developments of other basic compounds.

A. Ohkubo et al. *J.Chromatogr. A* 779 (1997) 113-122.

[HPLC Conditions]

Column size : 2.0 mm i.d. x 150 mm
 Mobile phase : 10 mmol/L HCOONH₄ (pH3, HCOOH) / CH₃CN
 Flow rate : 200 μl/min
 Temp. : 40 °C
 Inj. vol. : 2 μL
 Sample dissolved in: CH₃OH

