極性の高い化合物の代表例として、 5 種の有機酸を 2 種の表面多孔性充填剤を用い分離の様子を比較してみました.メタノール系,アセトニトリル系,いずれの移動相においても CAPCELL CORE ADME は C_{18} タイプに比べ保持が強く分離も向上しています.

Five organic acids, as representative polar model compounds, were separated with two kinds of superficially porous phases. CAPCELL CORE ADME showed larger overall retention and better resolution among the compounds, in both methanol-based and acetonitrile-based mobile phases, than those of the C_{18} type.

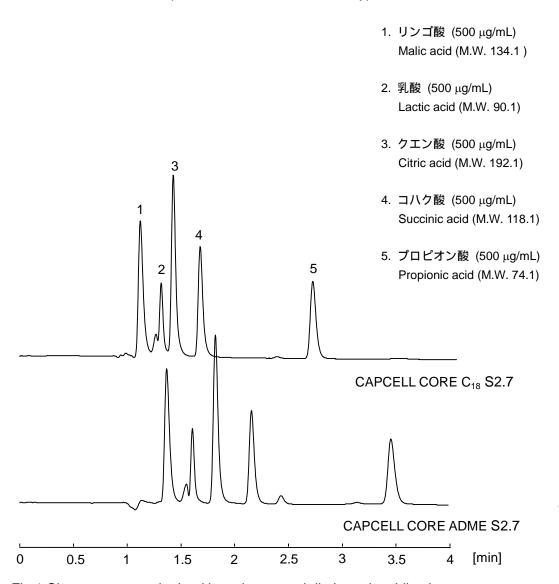


Fig.1 Chromatograms obtained by using acrtonitrile-based mobile phase

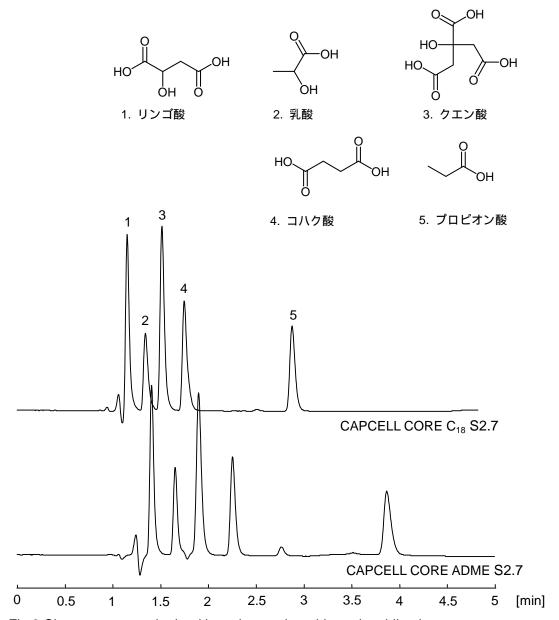


Fig.2 Chromatograms obtained by using methanol-based mobile phase

[HPLC Conditions]

Columns : CAPCELL CORE C₁₈ S2.7 ; 2.1 mm i.d. x 100 mm

: CAPCELL CORE ADME S2.7 ; 2.1 mm i.d. x 100 mm

Mobile phase : $0.1 \text{ vol}\% \text{ H}_3\text{PO}_4 / \text{CH}_3\text{CN} = 97.5 / 2.5 \text{ (Fig.1)}$

 $0.1 \text{ vol}\% \text{ H}_3\text{PO}_4 / \text{CH}_3\text{OH} = 95 / 5 \text{ (Fig.2)}$

 $\begin{array}{lll} \text{Flow rate} & : & 200 \; \mu\text{L/min} \\ \text{Temperature} & : & 40 \; ^{\circ}\text{C} \\ \text{Detection} & : & \text{UV 210 nm} \end{array}$

Inj. vol. : $1 \mu L$

Sample dissolved in : 2.5 vol% CH₃CN

 $1 \mu g/mL = 1 ppm$