

胆汁酸

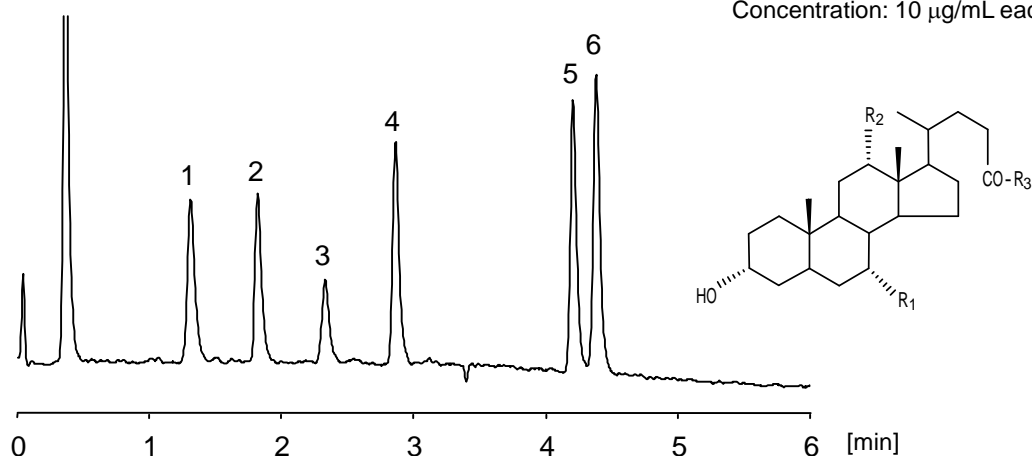
Bile acids

CAPCELL CORE C₁₈ S2.7 (2.1 mm i.d. x 50 mm) を用い 6 種類の胆汁酸を分析しました。検出には NQAD を用いました。NQAD はギ酸を含む移動相にて質量分析計の補佐的手段として有用です。

Six bile acids were separated with CAPCELL CORE C₁₈ S2.7 (2.1 mm i.d. x 50 mm), and detected with nano quantity analyte detector (NQAD). NQAD seems useful as a detection technique supporting a mass spectrometer under mobile phases containing formic acid.

Compound name	R ₁	R ₂	R ₃	M.W.
1. タウロコール酸 Taurocholic acid, TCA	-OH	-OH	-NH(CH ₂) ₂ SO ₃ H	515.7
2. グリココール酸 Glycocholic acid, GCA	-OH	-OH	-NHCH ₂ COOH	465.6
3. タウロケノデオキシコール酸 Taurochenodeoxycholic acid, TCDC	-OH	-H	-NH(CH ₂) ₂ SO ₃ H	499.7
4. コール酸 Cholic acid, CA	-OH	-OH	-OH	408.5
5. デオキシコール酸 Deoxycholic acid, DCA	-H	-OH	-OH	392.5
6. ケノデオキシコール酸 Chenodeoxycholic acid, CDCA	-OH	-H	-OH	392.5

Concentration: 10 µg/mL each



【HPLC Conditions】

Column	: CAPCELL CORE C ₁₈ S2.7 ; 2.1 mm i.d. x 50 mm
Mobile phase	: A) 0.1 vol% HCOOH B) CH ₃ CN B 30 % (0 min) 60 % (5 min) 60 % (6 min) 30 % (6.1 min) Gradient
Flow rate	: 400 µL/min
Temperature	: 50 °C
Detector	: NQAD (Evaporation 35 , Nebulizer 30 , Filter 2.5 sec)
Inj. vol.	: 2 µL
Sample dissolved in	: Each standard compound was separately dissolved in CH ₃ OH at 1 mg/mL. Equal amount of all the solutions were mixed together, and further diluted to 10 µg/mL with 20 % CH ₃ CN. 1 µg/mL = 1 ppm