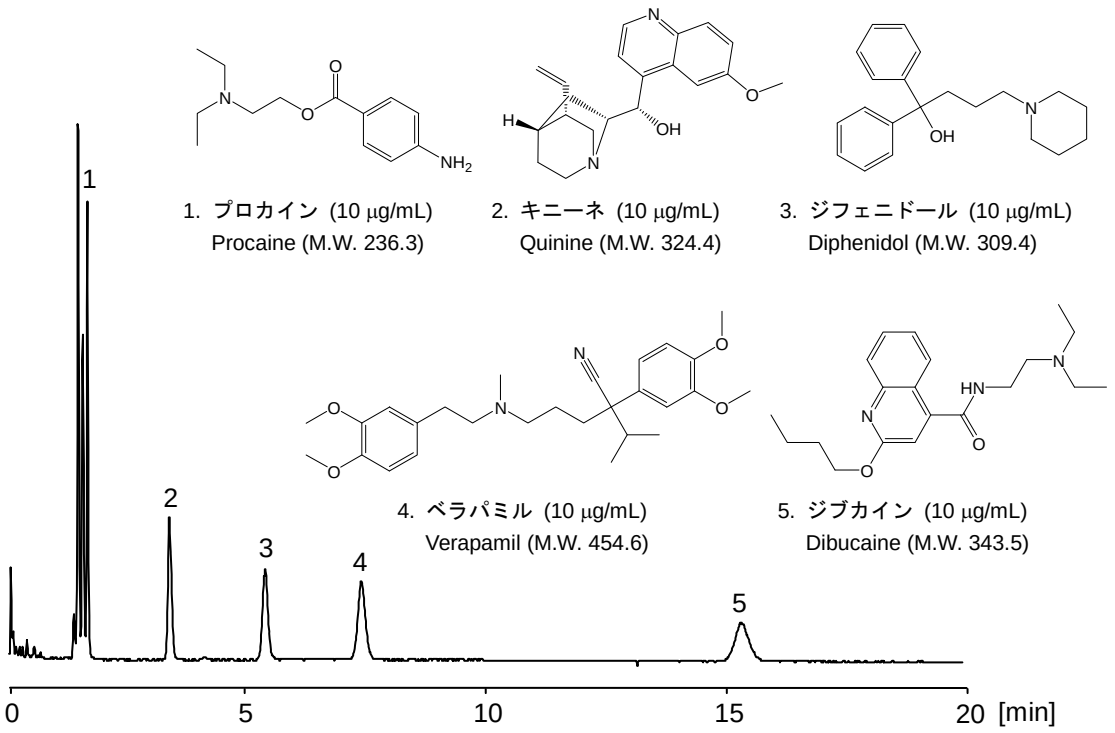
塩基性化合物　Basic compounds

代表的な塩基性化合物5種類をNQADにて測定した分析例を紹介します．NQADは，不揮発性から半揮発性の化合物を測定する検出器です．検出特性を考慮して，カラムにはブリードの少ないCAPCELL PAK C_{18} MGIII S5（4.6 mm i.d. x 150 mm）を用いました.

The simultaneous determination of 5 typical basic compounds was performed with NQAD detector. NQAD is developed as a Universal HPLC detector to provide exhaustive determination of semi-volatile and nonvolatile compounds, therefore sensitive to the background derived from the analysis system. In response to better detection performance, CAPCELL PAK C_{18} MGIII S5 (4.6 mm i.d. x 150 mm) with minimized bleeding was applied.



1. プロカイン (10 μg/mL)
Procaine (M.W. 236.3)

2. キニーネ (10 μg/mL)
Quinine (M.W. 324.4)

3. ジフェニドール (10 μg/mL)
Diphenidol (M.W. 309.4)

4. ベラパミル (10 μg/mL)
Verapamil (M.W. 454.6)

5. ジブカイン (10 μg/mL)
Dibucaine (M.W. 343.5)

【HPLC Conditions】

Column	: CAPCELL PAK C_{18} MGIII S5 ; 4.6 mm i.d. x 150 mm
Mobile phase	: 20 mmol/L $HCOONH_4$ (pH 3, HCOOH) / CH_3OH = 50 / 50
Flow rate	: 1 mL/min
Temperature	: 40 ˚C
Detector	: NQAD (Evaporation 35 ˚C, Nebulizer 30 ˚C, Filter 5 sec)
Inj. vol.	: 10 μL
Sample dissolved in	: Each standard compound was separately dissolved in CH_3OH at 1 mg/mL. Equal amount of all the solutions were mixed together, and further diluted to 10 μg/mL with 20 % CH_3OH.

※ 1 μg/mL = 1 ppm