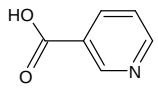
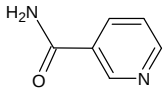
水溶性ビタミン類　Hydrophilic vitamins

CAPCELL CORE C_{18} S2.7（4.6 mm i.d. x 100 mm）を用い，ニコチン酸，ニコチンアミド及び水溶性ビタミン B 類を，イオンペア法により分析した例を示します．保持の弱いニコチン酸，ニコチンアミド及びパントテン酸が良好に分離しています．

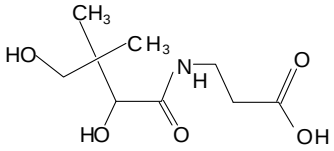
Nicotinic acid, nicotinamide, and compounds of vitamin B group were separated by the ion-pair method with CAPCELL CORE C_{18} S2.7 (4.6 mm i.d. x 100 mm). The three compounds of relatively small retention, nicotic acid, nicotinamide, and pantothenic acid, were well separated.



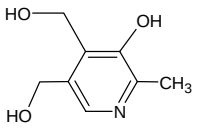
1. ニコチン酸（10 μg/mL）
Nicotinic acid (M.W. 123.1)



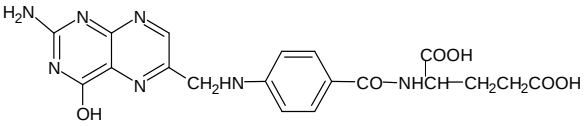
2. ニコチンアミド（10 μg/mL）
Nicotinamide (M.W. 122.1)



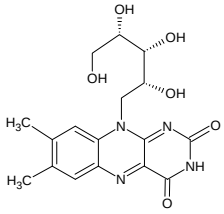
3. パントテン酸（50 μg/mL）
Pantothenic acid (M.W. 219.2)



4. ピリドキシン（10 μg/mL）
Pyridoxine (M.W. 169.1)



5. 葉酸（20 μg/mL）
Folic acid (M.W. 441.1)



6. リボフラビン（10 μg/mL）
Riboflavin (M.W.376.4)

【HPLC Conditions】

Column	: CAPCELL CORE C_{18} S2.7 ; 4.6 mm i.d. x 100 mm
Mobile phase	: Sodium octane sulfonate and phosphoric acid was added to a solution (H_2O / CH_3CN = 92 / 8) at 5 mmol/L and 0.1 vol%, respectively.
Flow rate	: 1.0 mL / min
Temperature	: 40 ˚C
Detection	: UV 210 nm
Inj. vol.	: 5 μL
Sample dissolved in	: Nicotinic acid, Nicotinamide, Pantothenic acid sodium, Pyridoxine hydrochloride, Folic acid, and Riboflavin were separately dissolved in water at 1 mg/mL. Solution of Pantothenic acid sodium was diluted with the mobile phase to 50 μg/mL, those of Folic acid was diluted with the mobile phase to 20 μg/mL, and those of Nicotinic acid, Nicotinamide, Pyridoxine hydrochloride, and Riboflavin were deiluted with the mobile phase to 10 μg/mL.

1 μg/mL = 1 ppm