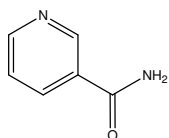


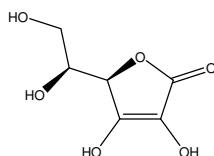
水溶性ビタミン

Water soluble vitamins

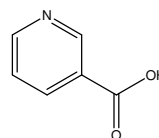
水溶性ビタミン 9 種類を CAPCELL PAK C₁₈ KG S5 (4.6 mm i.d. x 250 mm) を用いて分析した例を示します。



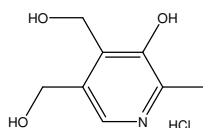
1. ニコチンアミド (20 µg/mL)
Nicotinamide (M.W. 122.1)



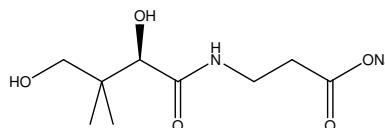
2. アスコルビン酸 (50 µg/mL)
Ascorbic acid (M.W. 176.1)



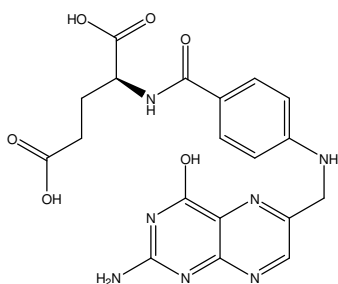
3. ニコチン酸 (20 µg/mL)
Nicotinic acid (M.W. 123.1)



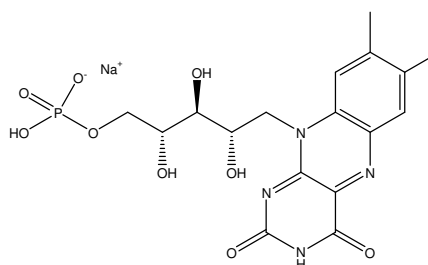
4. 塩酸ピリドキシン (10 µg/mL)
Pyridoxine hydrochloride (M.W. 205.6)



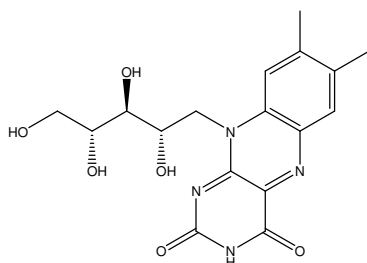
5. D-パントテン酸ナトリウム (50 µg/mL)
Sodium D-pantothenate (M.W. 241.2)



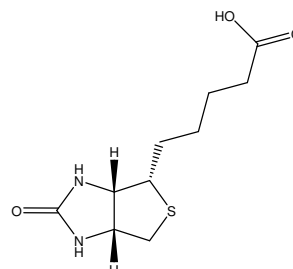
6. 葉酸 (10 µg/mL)
Folic acid (M.W. 441.1)



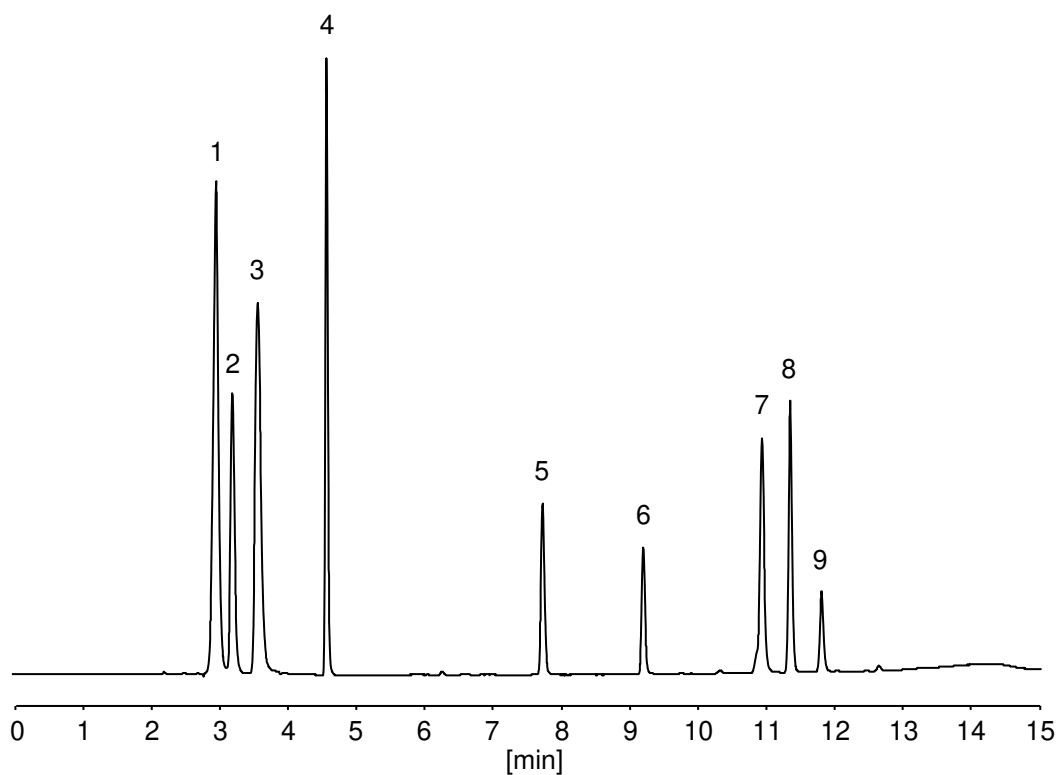
7. リン酸リボフラビンナトリウム (20 µg/mL)
Riboflavin sodium phosphate (M.W. 478.3)



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



9. ビオチン (50 µg/mL)
Biotin (M.W. 244.3)



【HPLC Conditions】

Column : CAPCELL PAK C₁₈ KG S5 ; 4.6 mm i.d. x 250 mm
 Mobile phase : A) 0.1 vol% H₃PO₄ B) 50 vol% CH₃CN
 B 1 % (0 min) -> 65 % (15 min) -> 1 % (15.1 min) Gradient
 Flow rate : 1 mL/min
 Temperature : 40 °C
 Detection : UV 210 nm
 Inj. vol. : 10 μL
 Sample dissolved in : Ascorbic acid, nicotinic acid, nicotinamide,
 sodium D-pantothenate, pyridoxine hydrochloride, and riboflavin
 sodium phosphate were separately dissolved in water
 to 1 mg/mL. Folic acid was dissolved in 80 mmol/L sodium
 hydroxide solution to 1 mg/mL, riboflavin was dissolved in 10
 mmol/L sodium hydroxide solution to 1 mg/mL, and biotin was
 dissolved in 50 vol% methanol to 1 mg/mL. Each solution was
 mixed as described above, and phosphoric acid was added to
 achieve a final concentration of 0.1 vol%.

※ 1 μg/mL = 1 ppm