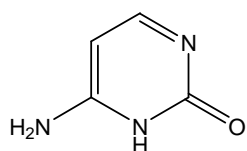


核酸塩基

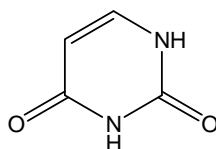
Nucleic acid bases

核酸塩基は DNA, RNA の構成要素であり, プリン塩基 (アデニン, グアニン) とピリミジン塩基 (シトシン, チミン, ウラシル) に分類されます. ここでは, CAPCELL CORE AQ S2.7 (2.1 mm i.d. x 150 mm) を用いて水系 100% の移動相で分析した例を示します. 5 分以内に良好な分離を達成しています.

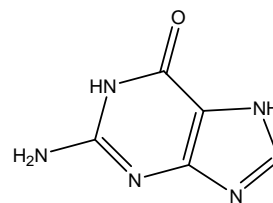
Nucleic acid bases, a part of the DNA and RNA structures, are divided into two types, purines (adenine, guanine) and pyrimidines (cytosine, thymine, uracil). CAPCELL CORE AQ S2.7 (2.1 mm i.d. x 150 mm) allowed the use of 100% aqueous mobile phase and could separate the five nucleic acid bases efficiently within five minutes.



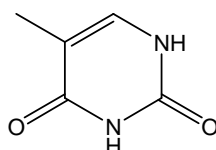
1. シトシン (5 $\mu\text{g/mL}$)
Cytosine (M.W. 111.1)



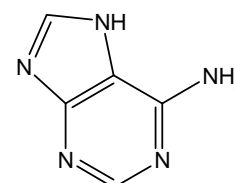
2. ウラシル (5 $\mu\text{g/mL}$)
Uracil (M.W. 112.1)



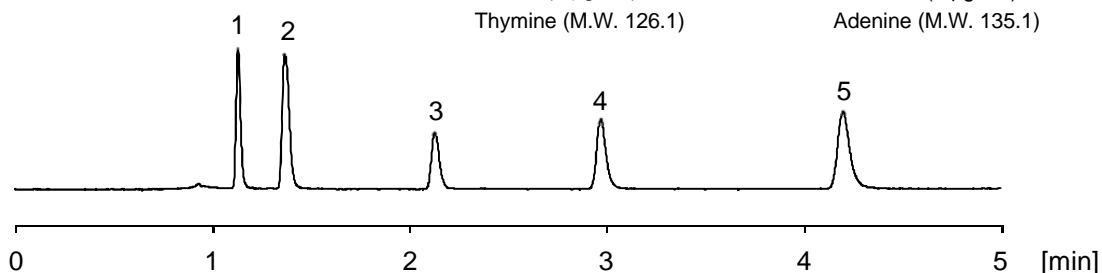
3. グアニン (5 $\mu\text{g/mL}$)
Guanine (M.W. 151.1)



4. チミン (5 $\mu\text{g/mL}$)
Thymine (M.W. 126.1)



5. アデニン (5 $\mu\text{g/mL}$)
Adenine (M.W. 135.1)



【HPLC Conditions】

Column	: CAPCELL CORE AQ S2.7; 2.1 mm i.d. x 150 mm
Mobile phase	: 10 mmol/L HCOONH ₄
Flow rate	: 400 $\mu\text{L/min}$
Temperature	: 40 °C
Detection	: UV 254 nm
Inj. vol.	: 1 μL
Sample dissolved in	: Mobile phase
	※ 1 $\mu\text{g/mL}$ = 1 ppm