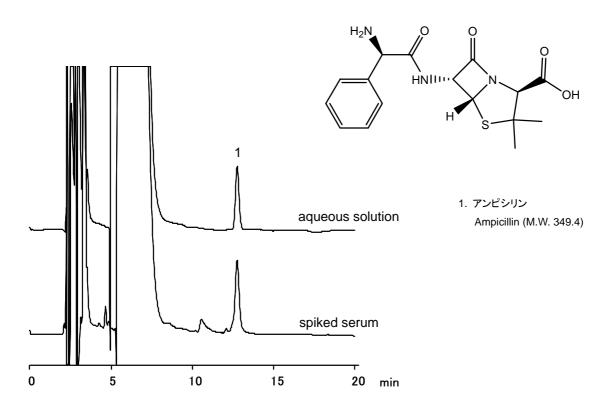
アンピシリン Ampicillin

アンピシリンは,最も広く使用されているペニシリン系抗生物質です.上段が水溶液,下段がヒトプール血清・アンピシリン添加試料のクロマトグラムです.

Amipicillin is one of the most common penicillin-type antibiotics. Its aqueous solution (upper) and spiked human serum (lower) were run under the same condition.



[HPLC Conditions]

Column : CAPCELL PAK C_{18} MGII S5 ; 2.0 mm i.d. x 250 mm

Mobile phase : 10 mmol/L HCOONH₄ (adjusted at pH3.0 with HCOOH) / CH₃CN

= 90 / 10

 $\begin{array}{lll} \text{Flow rate} & : & 200 \; \mu\text{L/min} \\ \text{Temperature} & : & 40 \; ^{\circ}\text{C} \\ \text{Detection} & : & \text{UV 220 nm} \end{array}$

Inj. vol. : $2 \mu L$

Pretreatment : Ampicillin solution (100 μg/mL in methanol) was diluted 10-fold with

water. 100 μ L of the diluted solution was mixed with 900 μ L of standard human serum. Trichloroacetic acid was added to the mixture at 10 w/v%. After mixing completely, the mixture was centrifuged (1500 rpm, 15 min), and its supernatant was introduced to HPLC. The

same procedure was repeated with the serum replaced by water (the upper chromatogram).

 \times 1 µg/mL = 1 ppm