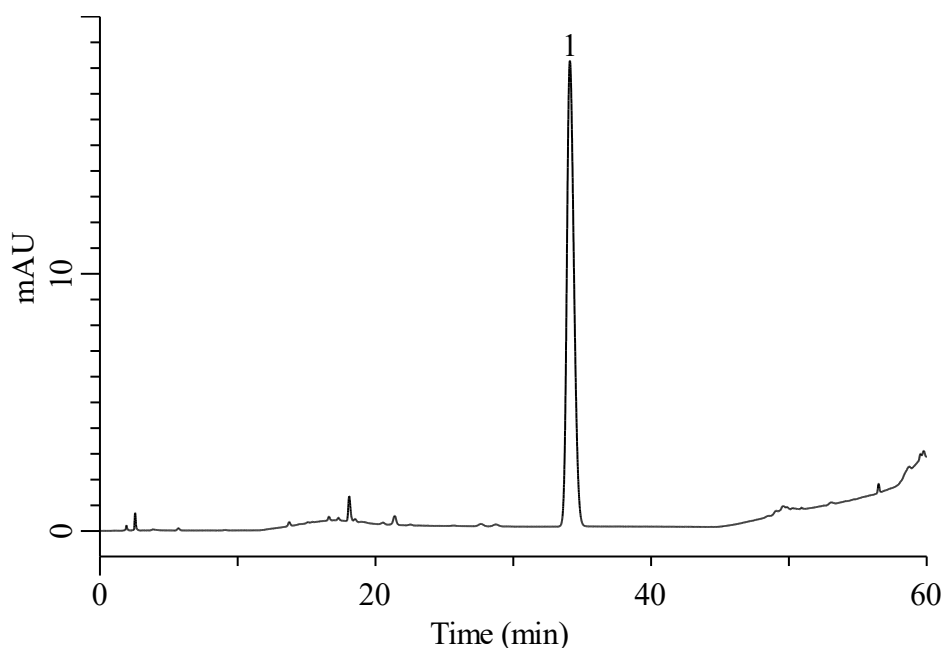


Analysis of Piperacillin Sodium

(Under the Condition of the Japanese Pharmacopoeia 18th, Piperacillin Sodium, Purity (4) Related substances)



Conditions

System : Chromaster HPLC system (HITACHI)
Column : InertSustain WP300 C18 (GL Sciences Inc.)
 (5 μ m, 150 x 4.6 mm I.D.)
Column Cat. No. : 5020-05845
Eluent : A) CH₃CN/ H₂O/ 0.2 M KH₂PO₄
 = 25/24/1, v/v/v
 B) CH₃CN/ H₂O/ 0.2 M KH₂PO₄
 = 45/4/1, v/v/v

Time(min)	A(%)	B(%)
0	0	100
7	0	100
13	17	83
41	17	83
56	80	20
60	80	20

Flow Rate : 1.0 mL/min
Col. Temp. : 25 °C
Detection : UV 220 nm
Injection Vol. : 20 μ L
Sample : Standard

Analyte:

1. Piperacillin Sodium 20 μ g/mL
 Tailing factor : 1.23 (\leq 1.5)
 Number of theoretical plates : 21,125 (\geq 15,000)
 RSD of the peak area (n=3) : 0.34 (\leq 2.0)
 RT(min) : 34.18