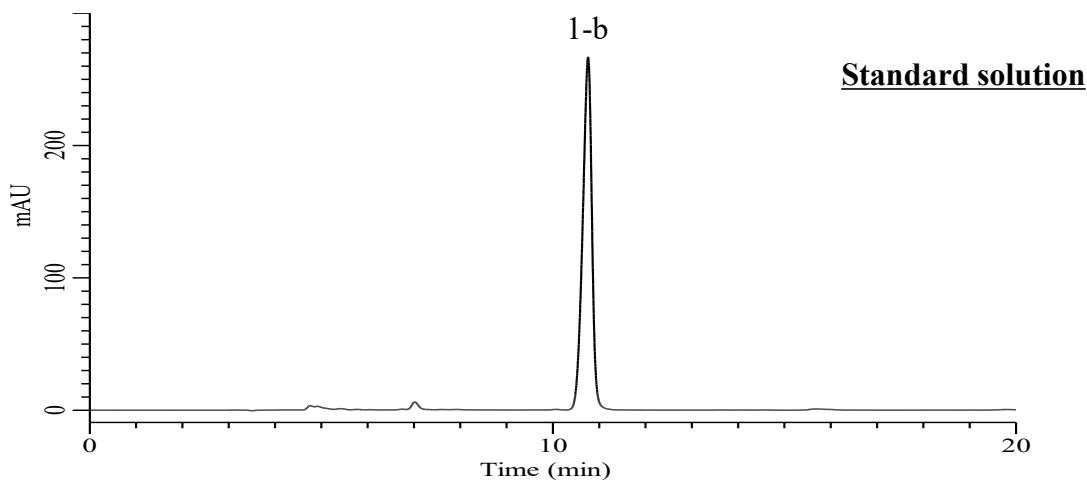
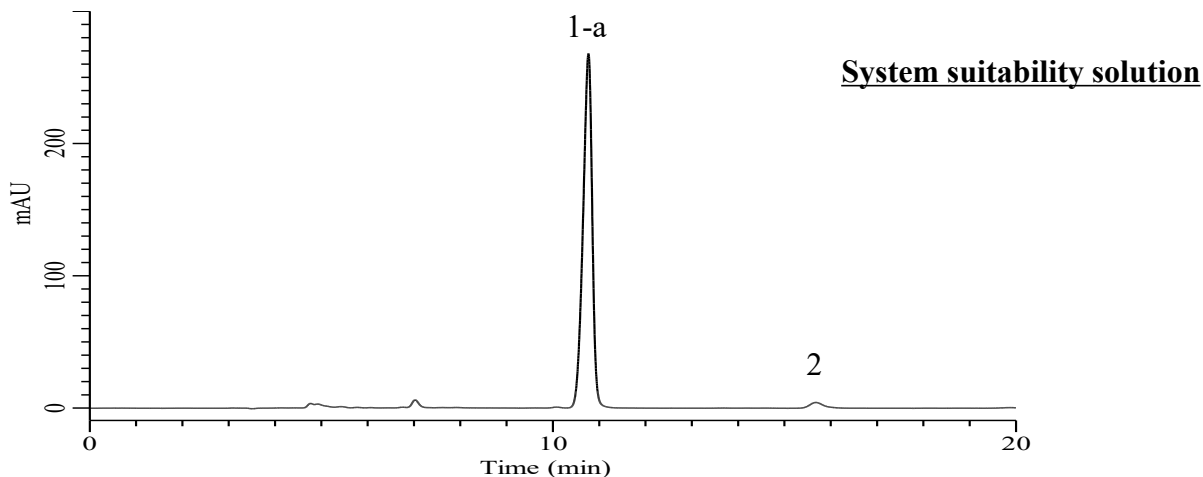


Analysis of Asparagine and Aspartic acid

(Under the Condition of USP NF 2023 Issue 1, Asparagine, ASSAY)



Conditions

System : Chromaster PLUS (HITACHI)
Column : InertSustain AQ-C18 (GL Sciences Inc.)
 (5 μm, 250 x 4.6 mm I.D.)
Column Cat. No. : 5020-89731
Eluent : Solution*
Flow Rate : 0.7 mL/min
Col. Temp. : 25 °C
Detection : UV 210 nm (Chromaster 5420 UV-VIS)
Injection Vol. : 20 μL
Sample : Standard in H₂O

Analyte:

1-a. Asparagine	1.5 mg/mL
1-b. Asparagine	1.5 mg/mL
2. Aspartic acid	75 μg/mL
Resolution (1-a, 2)	: 11.6 (≥ 5)
Tailing factor (1-b)	: 0.85 (≤ 2)
RSD of the peak area (1-b)(%)(n=6)	: 0.07 (≤ 1)

* : Dissolve 13.61 g of potassium phosphate, monobasic and 2.16 g of sodium 1-octanesulfonate in about 900 mL of water. Adjust with phosphoric acid to a pH of 2.2, and dilute with water to 1 L. Add 5.0 mL of acetonitrile and mix well.