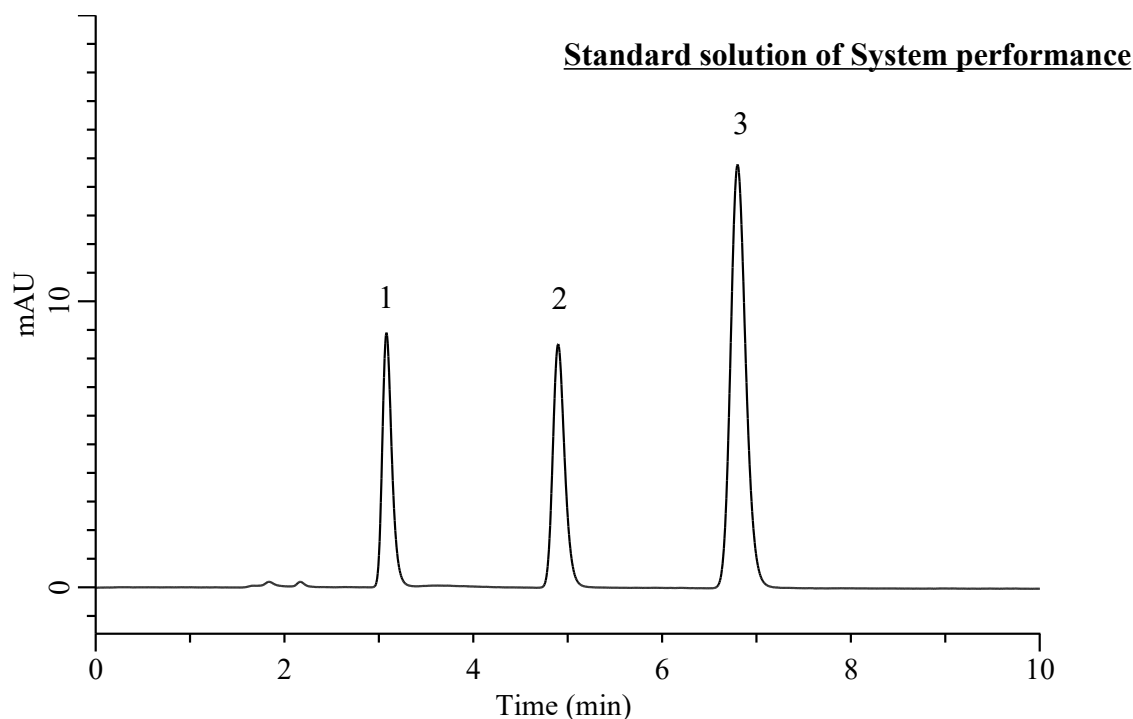


## Analysis of DL-Malic acid

(Under the Condition of the JPE (Japanese Pharmaceutical Excipients),  
Malic acid (5) Fumaric acid and Maleic acid)



### Conditions

**System** : Chromaster HPLC system (HITACHI)  
**Column** : InertSustain C18 (GL Sciences Inc.)  
           (5  $\mu$  m, 150 x 4.6 mm I.D.)  
**Column Cat. No.** : 5020-07345  
**Eluent** : 0.1 %  $\text{H}_3\text{PO}_4$  in  $\text{H}_2\text{O}$   
**Flow Rate** : 0.86 mL/min  
**Col. Temp.** : 35  $^\circ\text{C}$   
**Detection** : UV 210 nm  
**Injection Vol.** : 10  $\mu$  L  
**Sample** : Standard

### **Analyte:**

1. Malic acid	100 mg/L
2. Maleic acid	1 mg/L
3. Fumaric acid	1 mg/L

### Resolution

(1,2)	: 8.92 ( $\geq 2.0$ )
(2,3)	: 7.30 ( $\geq 2.0$ )

### RSD of the Peak area (%) (n=6)

2	: 0.18 ( $\leq 1.0$ )
3	: 0.36 ( $\leq 1.0$ )