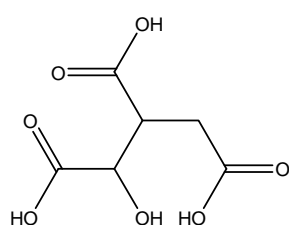


イソクエン酸, クエン酸

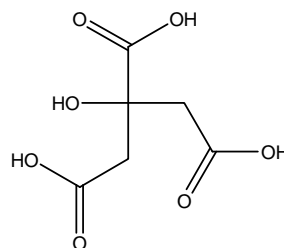
Isocitric acid and Citric acid

イソクエン酸及びクエン酸は、ともに3個のカルボキシル基を持つ酸性化合物であり、互いに異性体です。水酸基及びカルボキシル基等の極性基をもつような高極性化合物に適したカラム, CAPCELL PAK ADME S5 (4.6 mm i.d. x 250 mm) を用いて分析した例を示します。

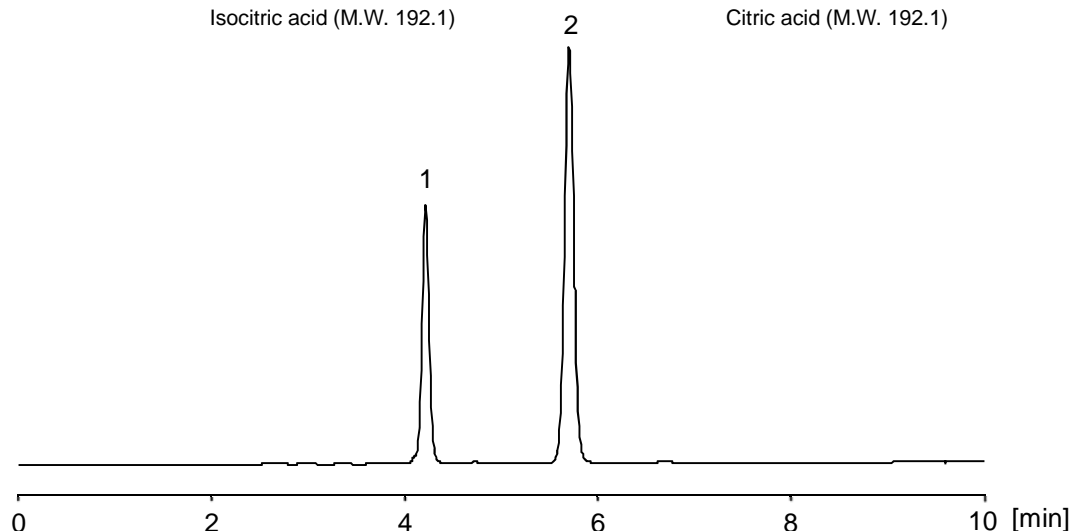
Isocitric acid and Citric acid are acidic compounds with the structure of 3 carboxyl groups, and act as the isomer of each other. CAPCELL PAK ADME S5 (4.6 mm i.d. x 250 mm), the suitable column for the high-polar compounds consisting of polar hydroxyl and carboxyl groups, could provide efficient separation.



1. イソクエン酸 (2 mg/mL)
Isocitric acid (M.W. 192.1)



2. クエン酸 (2 mg/mL)
Citric acid (M.W. 192.1)



【HPLC Conditions】

| | |
|---------------------|---|
| Column | : CAPCELL PAK ADME S5 ; 4.6 mm i.d. x 250 mm |
| Mobile phase | : 0.1 vol% H ₃ PO ₄ / CH ₃ OH = 95 / 5 |
| Flow rate | : 1 mL/min |
| Temperature | : 40 °C |
| Detection | : UV 220 nm |
| Inj. vol. | : 5 µL |
| Sample dissolved in | : 0.1 vol% H ₃ PO ₄ |
| | ※ 1 µg/mL = 1 ppm |