サルブタモール硫酸塩と関連物質の分離

Separation of Salbutamol Sulphate and Related Substances

Sunniest C8 3 µm, 150 x 4.6 mm i.d.

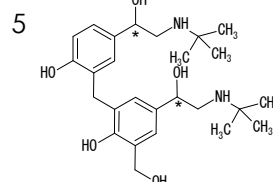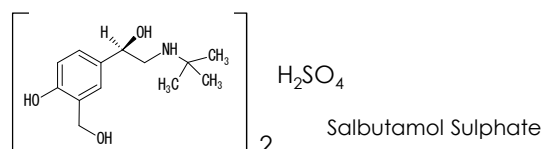The Relative retention time 0.936 and Resolution of 1.62 between Salbuamone(imp J) and Salbutamol sulphate
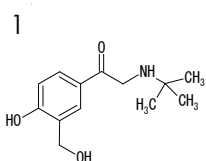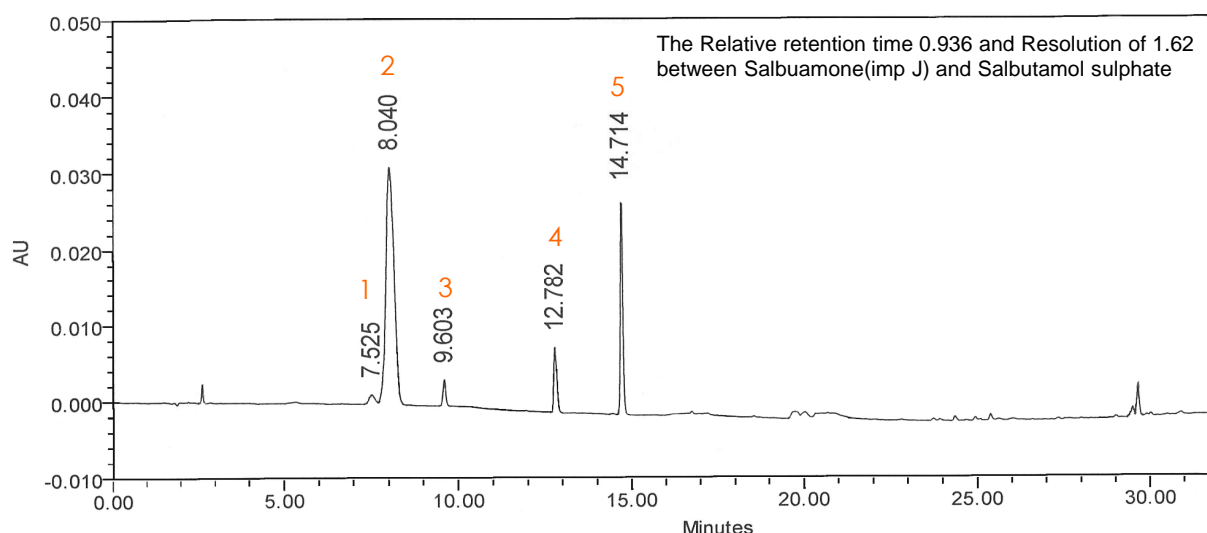
1
2-[(1,1-dimethylethyl)amino]-1-[4-hydroxy-3-(hydroxymethyl)phenyl]ethanone (salbutamone)

2
H₂SO₄ — Salbutamol Sulphate

3   unknown
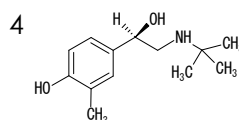
4
(1RS)-2-[(1,1-dimethylethyl)amino]-1-[4-hydroxy-3-methylphenyl]ethanol

5
2-[(1,1-dimethylethyl)amino]-1-[3-[[5-[2-[(1,1-dimethyethyl)amino]-1-hydroxyethyl]-2-hydroxyphenyl]methyl]-4-hydroxy-5-(hydroxymethyl)phenyletanol

＊The Relative retention time 0.936 and Resolution of 1.62 between Salbuamone(imp J) and Salbutamol sulphate

Column: Sunniest C8 3 µm, 150 x 4.6 mm

Mobile phase: A) dissolve 3.45 g of sodium dihydrogen phosphate monohydrate R in 900 mL of a 0.05 % V/V solution of triethylamine R, adjust to pH 3.0 with dilute phosphoric acid R and dilute to 1000 mL with a 0.05% V/V solution of triethylamine R;

B) methanol R, acetonitrile R (35:65 V/V)

Gradient: time 0 – 5 min   %B 5%
time 5 – 30 min   %B 5 – 90%

Flow rate: 1.0 mL/min

Temperature: 30 ºC

Detection: UV@273nm