

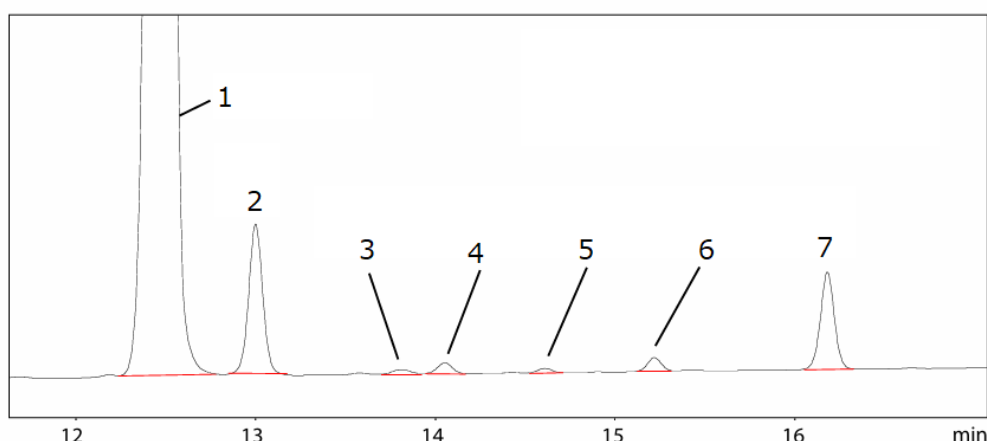
CoreFocus Report

No.575

LC-MS Reversed-phase Shim-pack™ Series

Shim-pack Scepter™ Phenyl-120 Analysis of Pharmaceutical Impurities

Keywords: Montelukast, pharmaceutical impurities



1. Montelukast
2. Impurity1
3. Impurity2
4. Impurity3
5. Impurity4
6. Impurity5
7. Impurity6

[HPLC conditions] (Nexera™ X3) (Method Scouting System)

Column : Shim-pack Scepter Phenyl-120,
100 mm x 3.0 mm I.D., 1.9 μm⁺

Mobile phases : A) 0.15 % Formic acid in water
: B) 0.1 % formic acid in acetonitrile

Time program : B Conc. 45 % (0 - 3 min) → 75 % (13 min)
→ 45 % (13.01 - 18 min)

Column temp. : 30 °C

Flow rate : 0.5 mL/min

Injection vol. : 10 μL (1000 mg/L)

Detection(PDA) : 238 nm (SPD-M40, UHPLC cell)

1*: P/N : 227-31064-03

[MS conditions] (LCMS-2050)

Ionization : ESI/APCI (DUIS™),
positive and negative mode

Mode : SCAN (*m/z* 400-800)

Nebulizing gas flow : 2.0 L/min

Drying gas flow : 5.0 L/min

Heating gas flow : 7.0 L/min

DL temp. : 200 °C

Desolvation temp. : 450 °C

Interface voltage : +3.0 kV/-2.0 kV

Qarray voltage : +20 V

Source : Application News 01-00443 ([JP,ENG](#))

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