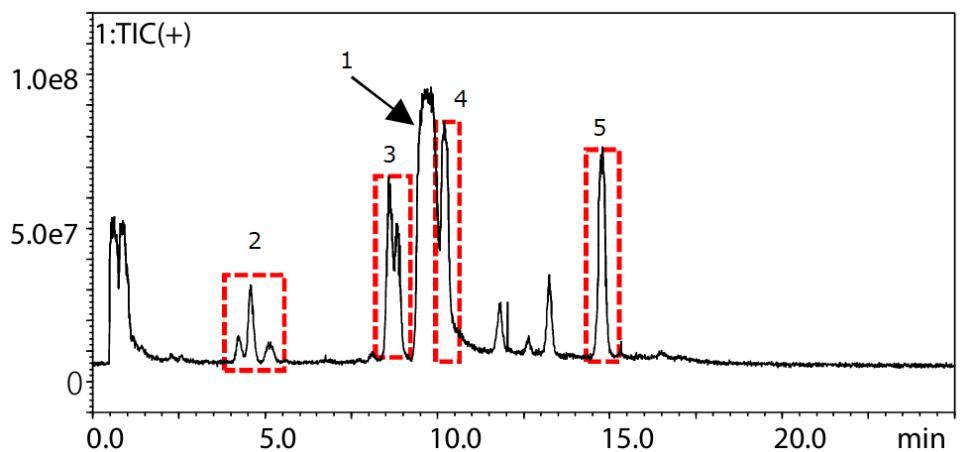


CoreFocus
Report
No.572

LC-MS Reversed-phase Shim-pack™ Series

Shim-pack Scepter™ Phenyl-120
Analysis of Impurities in Montelukast
Keywords: pharmaceuticals, Montelukast


1. Montelukast
2. Impurity 1
3. Impurity 2/3
4. Impurity 4
5. Impurity 5

[HPLC conditions] (Nexera™ XR)

Column : Shim-pack Scepter Phenyl-120,
 50 mm x 2.1 mm I.D., 1.9 μ m¹
 Mobile phases : A) Water/formic acid = 2000:3
 : B) Acetonitrile/formic acid = 2000:3
 Flow rate : 0.25 mL/min
 Time program : B Conc. 45 % (0 - 3 min) → 65 % (16
 min) → 45 % (16.1 - 25 min)
 Column temp. : 30 °C
 Injection vol. : 10 μ L
 Vial : SHIMADZU LabTotal™ for LC 1.5 mL,
 Glass²
 Detection : 238 nm (SPD-M40)

[MS conditions] (LCMS-2050)

Ionization : ESI/APCI (DUIS™), Positive
 mode
 Nebulizing gas flow : 3.0 L/min
 Drying gas flow : 5.0 L/min
 Heating gas flow : 7.0 L/min
 DL temp. : 250 °C
 Desolvation temp. : 400°C
 Interface voltage : 3.0 kV
 Qarray voltage : 80 V

1*: P/N : 227-31063-03, 2*: P/N : 227-34001-01

 Source : Application News 01-00319 ([JP](#), [ENG](#))

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