

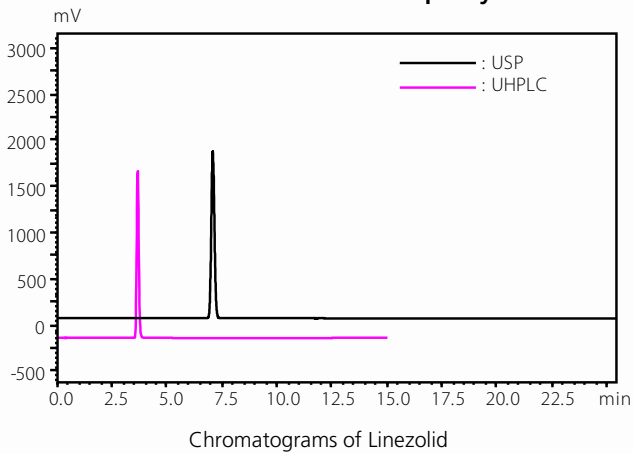
**CoreFocus**  
**Report**  
**No.140**

LC Reversed-phase Shim-pack™ Series

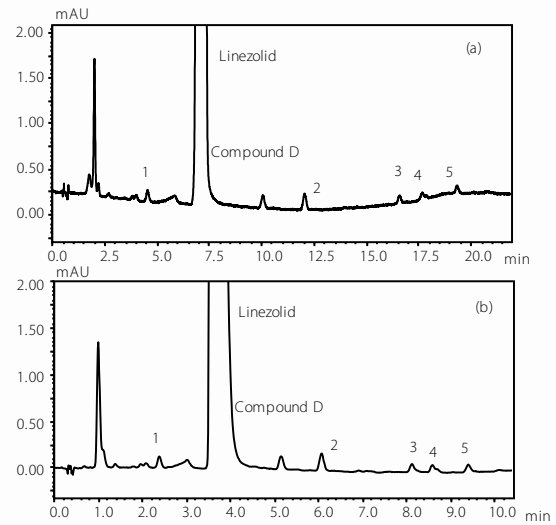
**Shim-pack Scepter™ C18-120**

**High-Speed Analysis of Linezolid**

**Keywords: oxazolidinones, antibiotics, antibacterial, infection, impurity**



Chromatograms of Linezolid



Enlarged Chromatograms of Linezolid - (a) USP, (b) UHPLC

1. Phosphoric acid, 2. Citric acid, 3. Malic acid  
4. Lactic acid, 5. Acetic acid

(a) USP

System	: Nexera™
Column	: Shim-pack Scepter C18-120 (75 mm L × 4.6 mm I.D., 5 μm), P/N : 227-31020-03
Mobile phase	: A) Methanol/Acetonitrile/1.4 g/L Monobasic potassium phosphate = 15/5/80 (v/v) B) Methanol/1.4 g/L Monobasic potassium phosphate = 50/50 (v/v)
Flow rate	: 1.5 mL/min
Time program	: B Conc.20 % (0 min) →43 % (8 min) →100 % (18 min) →100 % (25 min) →20 % (25.01-30 min)
Injection vol.	: 10 μL
Column temp.	: 30 °C
Detection	: UV 254 nm

(b) UHPLC

System	: Nexera™
Column	: Shim-pack Scepter C18-120 (50 mm L × 2.0 mm I.D., 1.9 μm), P/N : 227-31011-03
Mobile phase	: A) Methanol/Acetonitrile/1.4 g/L Monobasic potassium phosphate = 15/5/80 (v/v) B) Methanol/1.4 g/L Monobasic potassium phosphate = 50/50 (v/v)
Flow rate	: 0.45 mL/min
Time program	: B Conc.20 % (0 min) →43 % (3.4 min) →100 % (7.6 min) →100 % (10.6 min) →20 % (10.61-12.7 min)
Injection vol.	: 2 μL
Column temp.	: 30 °C
Detection	: UV 254 nm

Source : Application News L.542 ([JP](#), [ENG](#))

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