

CoreFocus
Report
No.27

LC

Reversed-phase

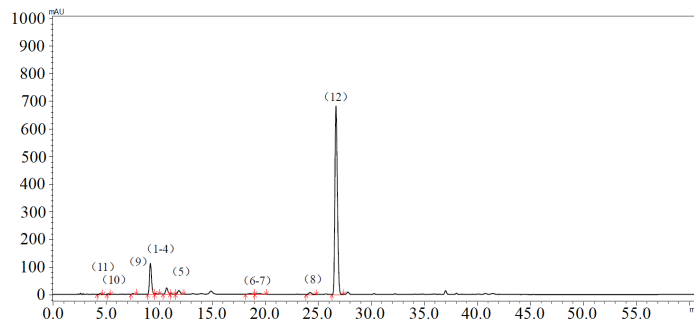
Shim-pack™ Series

Shim-pack Scepter™ C18-120

Analysis of Penicillin Sodium related substances

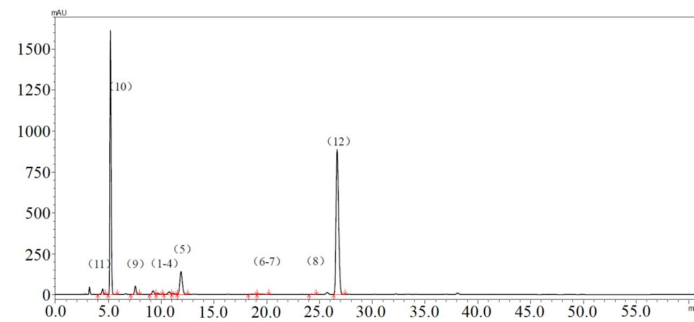
Keywords: β-lactam antibiotics, antifungal drug

Chromatogram of System suitability solution



- 1-4. Impurity E
- 5. Impurity I
- 6-7. Impurity F
- 8. Impurity J
- 9. Impurity H
- 10. Impurity D
- 11. Impurity G
- 12. Penicillin (4mg/mL in Water)

Chromatogram of Penicillin



Column	: Shim-pack Scepter C18-120 (5 μm, 250 mm x 4.6 mm I.D.) P/N: 227-31020-06
Mobile phase	: A) Phosphoric Buffer (10.6 g Potassium dihydrogen phosphate + 1000 mL water) containing Potassium hydroxide (pH 3.4) : Methanol = 72:14 B) Acetonitrile
Time program	: B Conc. 13.5 % (0 min-13 min) → 36% (37 min-49 min) → 13.5% (50 min-61 min)
Flow rate	: 1.0 mL/min
Column temp.	: 34°C
Injection vol.	: 20 μL
Vial	: LabTotal™ Vial for LC/LCMS, P/N : 227-34001-01
Detection	: UV at 225 nm

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