

CoreFocus
Report
No.29

LC

Reversed-phase

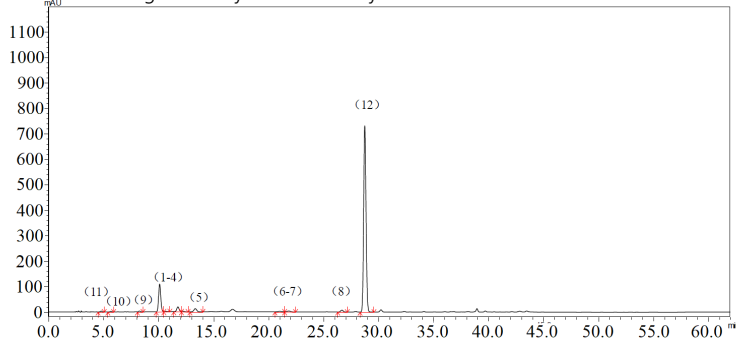
Shim-pack Series

Shim-pack™ GIST C18-AQ

Analysis of Penicillin Sodium related substances

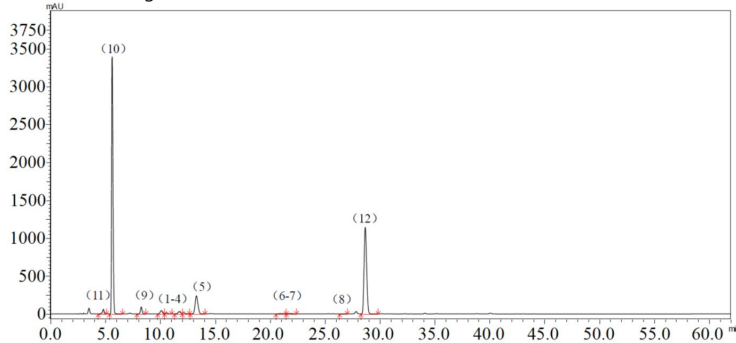
Keywords: β-lactam antibiotics, antifungal drug

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 GIST C18-AQ (250 mm x 4.6 mm I.D., 5 μm) P/N: 227-30742-08
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
Gradient program	: 13.5 %B(0 min-14 min) - 36%B(38 min-50 min) - 13.5%B(51 min-62 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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