

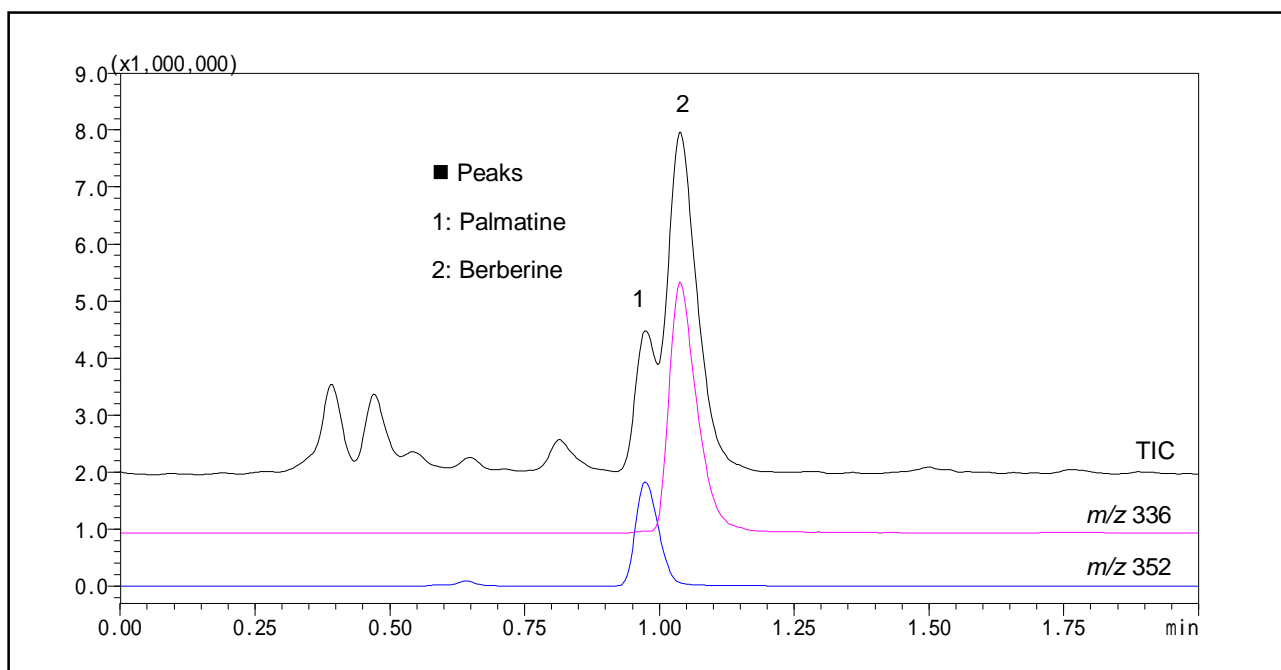
Application Data Sheet

High Performance Liquid Chromatography

No. 27

High-Speed Analysis of Berberine

Here we used an LCMS to conduct an analysis of berberine, an alkaloid that exists in the bark of the cork tree. Selective detection capability of the mass spectrometer is efficient in the separation of berberine and palmatine, enabling the analysis to be conducted in a short period of time.



Analysis of Berberine in Cork Tree Bark

[Sample Preparation]

After adding 1mL of methanol to 1 mg of finely powdered cork bark and centrifuge, the resulting supernatant fluid was filtered through a 0.45 μ m membrane filter.

Analytical Conditions

Instrument	: Prominence UFLC system + LCMS-2010EV
Column	: Shim-pack XR-ODS (75 mm x 2.0 mm <i>i.d.</i>)
Mobile Phase	: A) 0.1% Formic acid / Tetrahydrofuran = 95 / 5 (v / v) B) Acetonitrile B.conc; 15% to 25% (0 to 2 min)
Flow Rate	: 0.5 mL/min
Column Temperature	: 40 °C
Detection	: MS; ESI-Positive, Scan
Sample Volume	: 0.5 μ L