

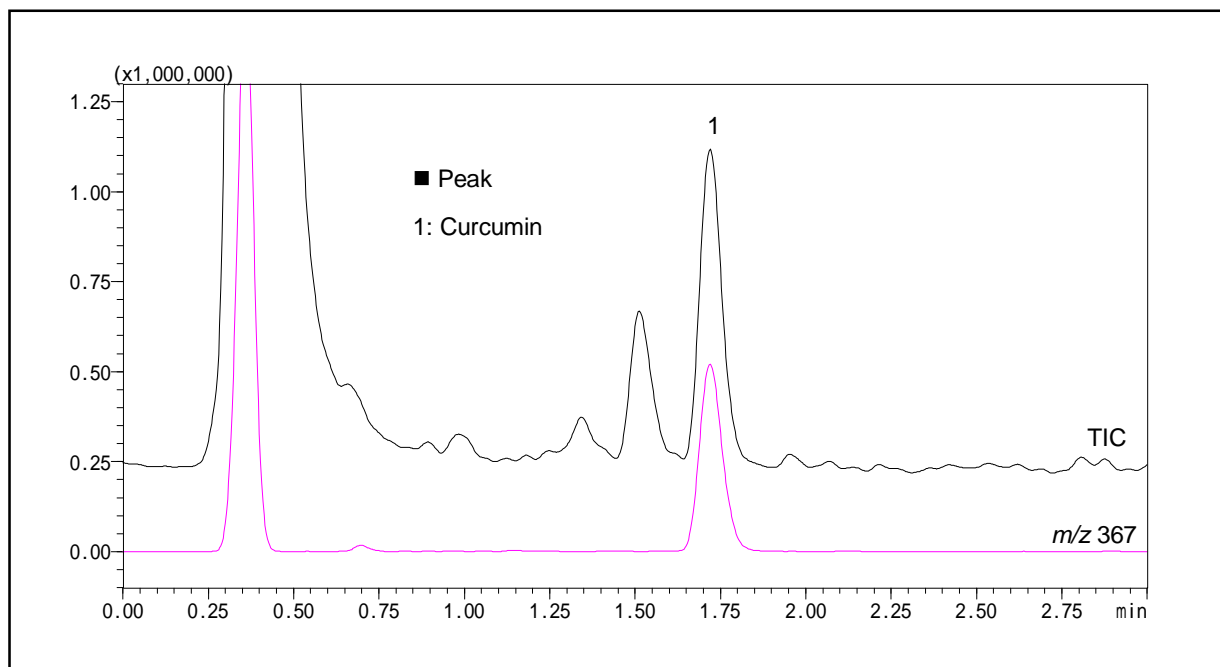
# Application Data Sheet

High Performance Liquid Chromatography

No. 25

## High-Speed Analysis of Curcumin

Turmeric is used as a natural medicine and colorant, and contains the yellow pigment curcumin. Here we used an LCMS to conduct the analysis of a beverage containing turmeric, and curcumin was detected as a deprotonated molecule.



Analysis of Curcumin in Turmeric Beverages

### [Sample Preparation]

A turmeric beverage was diluted by a factor of 10 with ethanol, and after separation in a centrifuge, the resulting supernatant was filtered through a 0.45  $\mu\text{m}$  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 B) Acetonitrile A / B = 50 / 50 (v / v)
Flow Rate	: 0.5 mL/min
Column Temperature	: 40 °C
Detection	: MS; ESI-Negative, Scan
Sample Volume	: 1 $\mu\text{L}$