

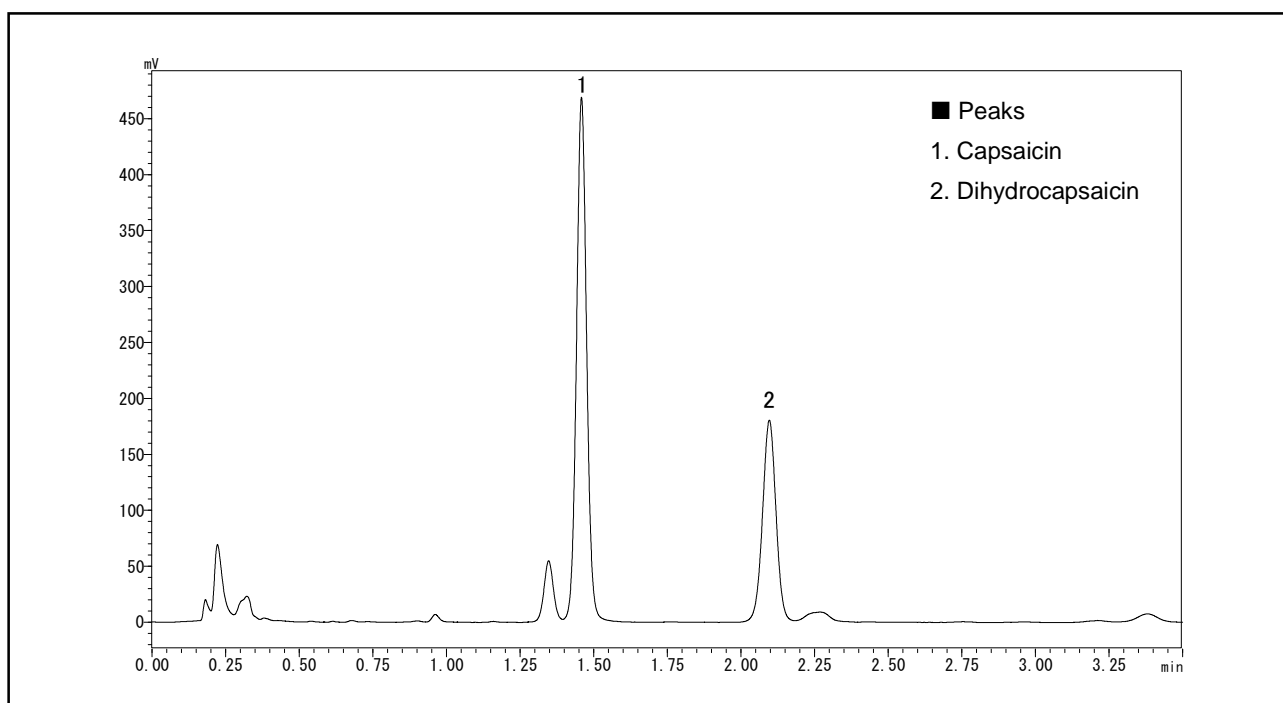
Application Data Sheet

High Performance Liquid Chromatography

No. 45

High-Speed Analysis of Capsaicins

The figure shows a UFLCXR analysis of capsaicins in cayenne pepper powder. By using Shimadzu fluorescence detector with a semi-micro flow cell, UFLCXR accomplished high speed analysis without loss of the separation efficiency.



Analysis of Capsaicins in Cayenne Pepper Powder

[Sample Preparation]

10 mL of ethanol was added to 0.1 g of sample and heated, then extracted ultrasonically for 1 hour. The resulting supernatant was then filtered using a 0.45 μm membrane filter.

Analytical Conditions

Instrument	: Prominence UFLCXr system
Column	: Shim-pack XR-ODSII (75 mm x 3.0 mm <i>i.d.</i>)
Mobile Phase	: 1% (v/v) Acetic acid aq. / Acetonitrile = 1 / 1 (v/v)
Flow Rate	: 1.2 mL/min.
Column Temperature	: 50°C
Detection	: Fluorescence (Ex. 280 nm, Em. 325nm) with semi-micro flow cell
Sample Volume	: 2 μL