

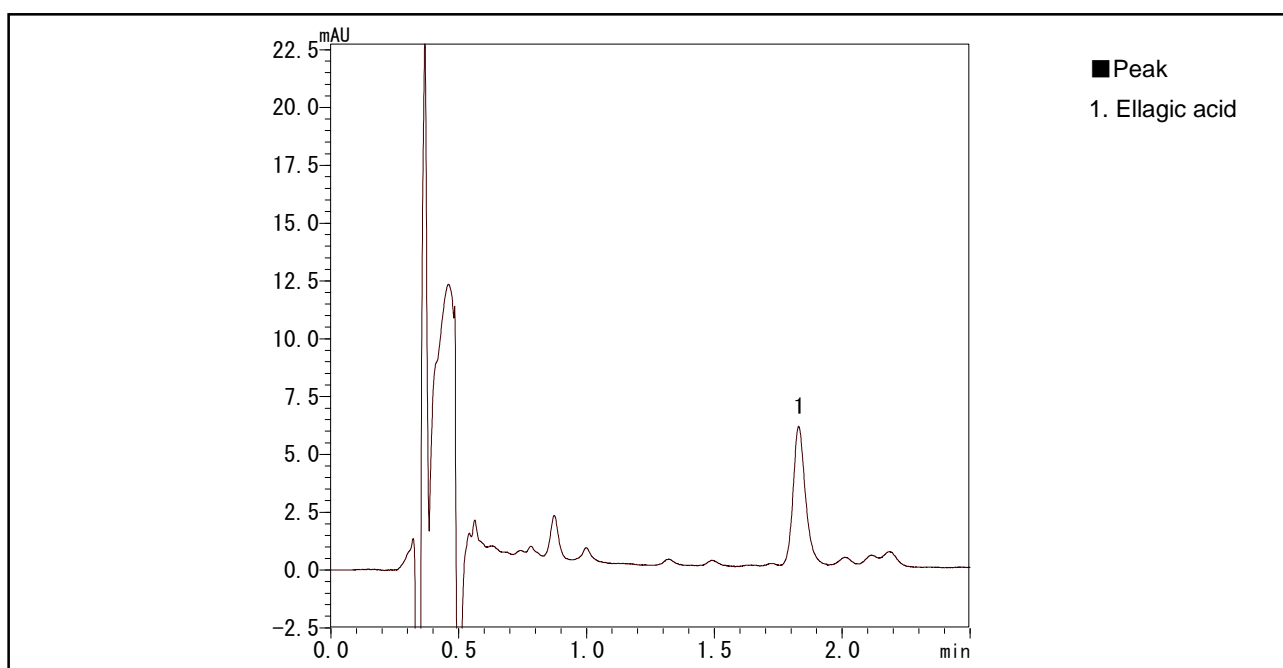
# Application Data Sheet

High Performance Liquid Chromatography

No. 51

## High-Speed Analysis of Ellagic Acid

Ellagic acid is one type of polyphenol and exists in abundance in nuts, raspberry, strawberry, and pomegranate. The figure shows ultra fast separation of ellagic acid in a commercially available raspberry jam.



Analysis of Ellagic Acid in Raspberry Jam

[Sample Preparation]

4mL of a mixed solution of methanol and 10mmol/L oxalic acid aqueous solution (3:1, v/v) was added to a 1g sample of raspberry jam, then extracted by applying ultrasonic waves for 30 minutes. After performing centrifugal separation, the resulting supernatant was filtered through a 0.2  $\mu$  m membrane filter.

### Analytical Conditions

Instrument	: Prominence UFLCXR system
Column	: Shim-pack XR-ODS (75 mm $\times$ 3.0 mm <i>i.d.</i> )
Mobile Phase	: 10 mmol/L oxalic acid aq. / acetonitrile = 83 / 17 (v/v)
Flow Rate	: 1.0 mL/min
Column Temperature	: 40 $^{\circ}$ C
Detection	: Absorbance at 360 nm with semi-micro flow cell
Sample Volume	: 4 $\mu$ L