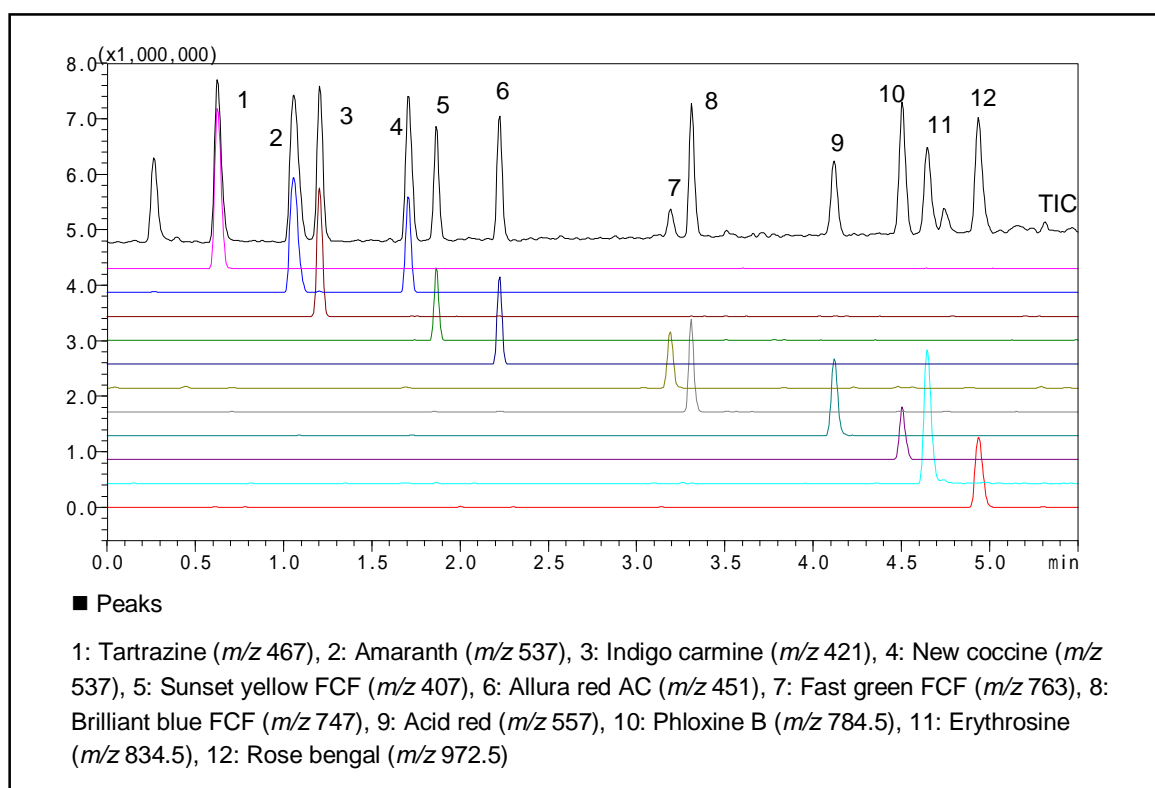


High-Speed Analysis of Artificial Colorant

Here we used an LCMS to conduct analysis of 12 artificial colorants used as food additives. For each colorant, negative ions were detected since these components contain sulfone groups or carboxyl groups.



Analysis of Artificial Colorant Standard Sample Mixtures

[Sample Preparation]

A solution of 10 mg/L to 100 mg/L of each standard sample was prepared.

Analytical Conditions

Instrument	: Prominence UFLC system + LCMS-2010EV
Column	: Shim-pack XR-ODS (50 mm x 2.0 mm <i>i.d.</i>)
Mobile Phase	: A) 20 mmol/L Ammonium acetate (pH 4.7) B) 20 mmol/L Ammonium acetate (pH 4.7) / Acetonitrile = 1 / 1 (v / v) B.conc; 10% to 100% (0 to 5 min)
Flow Rate	: 0.5 mL/min
Column Temperature	: 40 °C
Detection	: MS; DUIS-Negative, Scan
Sample Volume	: 5 μ L