

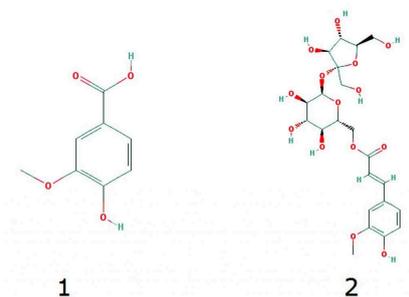
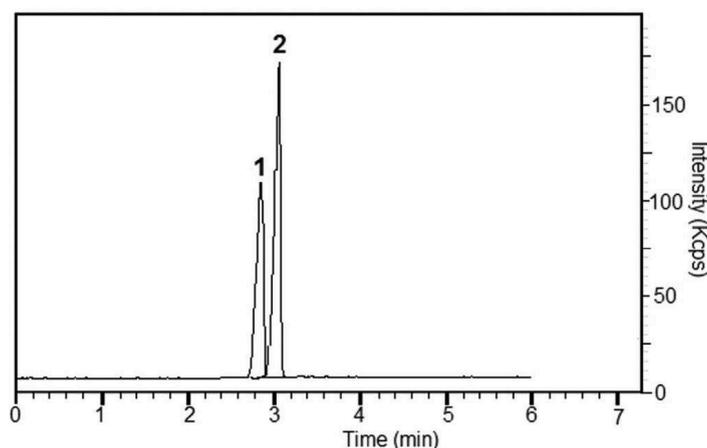
Vanillic Acid and 6'-O-Feruloyl Sucrose Analyzed with LC-MS - AppNote

Rice Extract Sample Containing Vanillic Acid and Feruloylsucrose

Click [HERE](#) for Column Ordering Information.

When commercial Rice Extracts were analyzed, only Vanillic Acid (*Peak 1*) was found in one out of 3 Extracts and 6'-O-Feruloylsucrose (*peak 2*) was found in all 3 extracts. The results were confirmed by analyzing spiked Rice Extract samples. The analysis was done in a single run by switching polarity between positive and negative ionization mode.

According to the literature [1], a Rice Extract should contain following compounds: Gallic Acid, Vanillic Acid, p-Coumaric Acid, Ferulic Acid, 3,5 Dimethoxy-4-Hydroxycinnamic Acid, Syringic Acid, Caffeic Acid, and 6'-O-Feruloylsucrose.



Peaks:

1. Vanillic Acid 167 m/z [M-H]⁻
2. 6'-O-Feruloylsucrose 178 m/z [M-C₁₂H₂₂O₁₁+H]⁺

Method Conditions

Column: Cogent Phenyl Hydride™, 4 μm, 100 Å

Catalog No.: [69020-05P-2](#)

Dimensions: 2.1 x 50 mm

Mobile Phase:

- A: DI Water with 0.1% Formic Acid (v/v)
- B: Acetonitrile with 0.1% Formic Acid (v/v)

Gradient:

Time (minutes)	%B
0	10
5	20
6	20
7	10

Post Time: 3 minutes**Injection vol.:** 1 µL

Flow rate: 0.3 mL / minute

Detection: ESI – NEG, POS - PerkinElmer Flexar SQ 300 Mass Spectrometer**Sample Preparation:** A commercially available Rice Extract was analyzed.**t_o** : 0.6 minutes

Note : Rice is a staple food in many countries. It contains phenolic compounds which have anticancer, antioxidant, and antimutagenic effects. It is important to analyze rice extracts to confirm the content of the phenolic compounds in rice.

[1] S. Tian, K. Nakamura, T. Cui, H. Kayahara, J. Chromatogr. A, 1063 (2005) 121-128.

**Attachment No 285 Vanillic Acid and 6'-O-Feruloylsucrose Analyzed with LCMS pdf 0.3 Mb**[Download File](#)

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MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: customers@mtc-usa.comWebsite: www.mtc-usa.com