# MICROSOLV

Vanillic Acid and 6′-O-Feruloylsucrose Analyzed with LCMS – 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.
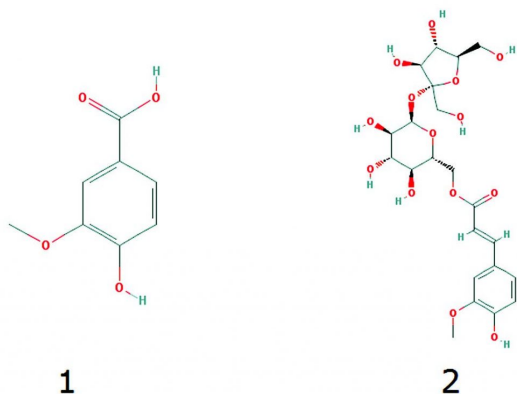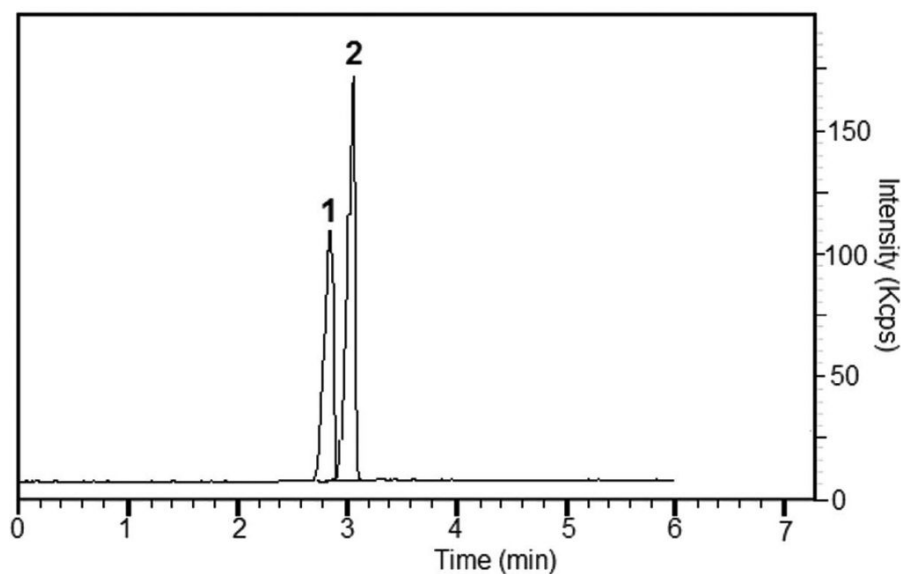
Peaks:

1. Vanillic Acid 167 m/z [M-H]–

2. 6′-O-Feruloylsucrose 178 m/z [M-$C_{12}H_{22}O_{11}$+H]+

Method Conditions

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

Catalog No.: 69020-05P-2

Dimensions: 2.1 x 50mm

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.: 1µL

Flow rate: 0.3mL / minute

Detection: ESI – NEG, POS – PerkinElmer Flexar SQ 300 Mass Spectrometer

Sample Preparation: A commercially available Rice Extract was analyzed.

t0: 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