

## 5 Phenolic Compounds Separated by LCMS – AppNote

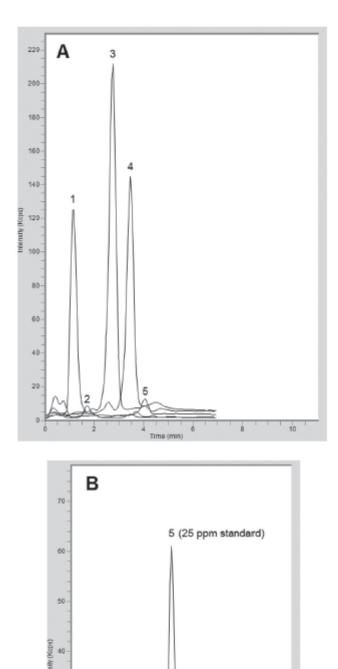
## **Commercial Rice Extract Analyzed Easily.**

Click HERE for Column Ordering Information.

A commercial rice extract was analyzed and peaks were assigned based on retention times and m/z values for the compounds of interest using the Cogent Phenyl Hydride Column . After method validation the developed procedure can be used to evaluate the quality of rice and to develop the best extraction procedure.

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# MICROS



(in the extract)

6

8

5

4

Time (min)

4

30

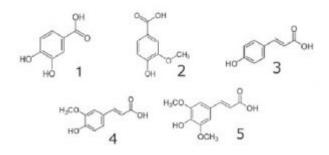
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10

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### **Peaks:**

1. 3,4-Hydroxybenzoic Acid 153 m/z [M-H]-

- 2. Vanillic Acid 167 m/z [M-H]-
- 3. p-Coumaric Acid 163 m/z [M-H]-
  - 4. Ferulic Acid 193 m/z [M-H]-
- 5. 3,5-Dimethoxy-4-Hydroxycinnamic Acid 223 m/z [M-H]-

## **Method Conditions**

Column: Cogent Phenyl Hydride™, 4µm, 1 00Å

Catalog No.: 69020-05P-2

Dimensions: 2.1 x 50 mm

### **Mobile Phase:**

A: DI Water / 0.1% Formic Acid (v/v)

B: Acetonitrile / 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: 0.4 mL/minute

Detection: ESI - NEG - PerkinElmer Flexar SQ 300 Mass Spectrometer

#### Samples:

Figure A: Commercial rice extract was analyzed.

Figure B: Peak of 3,5-Dimethoxy-4-Hydroxycinnamic Acid in commercial rice extract overlaid with the

peak for 25 ppm standard.

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to: 0.4 minutes

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Note: Rice is a staple food in many countries. It contains phenolic compounds which have anticancer, antioxidant, 9158 Industrial Blvd. NE, Leland, NC 28451 and antimutagenic effects. It is important to analyze rice extracts to confirm the content of the phenolic compounds in rice.

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Attachment

No 297 Phenolic Compounds Separated pdf 0.3 Mb Download File

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