

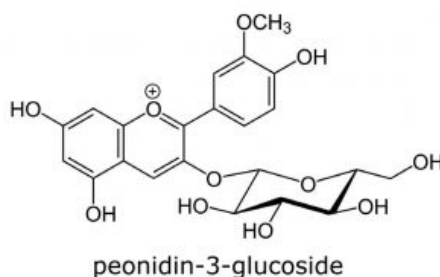
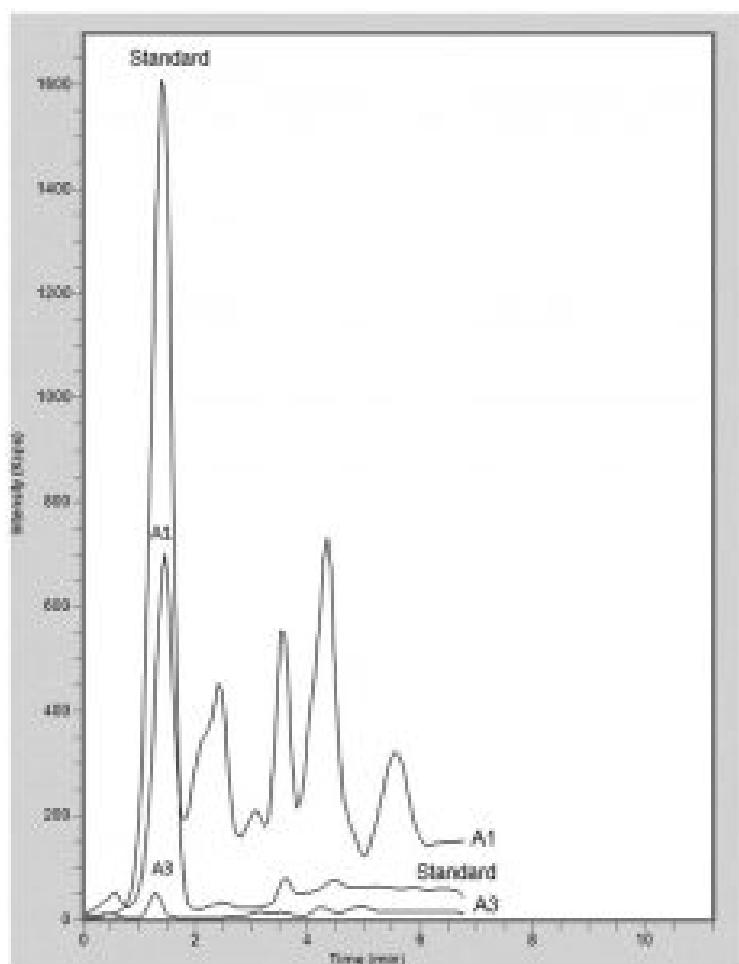
## Peonidin-3-Glucoside Analyzed by LCMS – AppNote

### LC-MS method for Anthocyanin- Fruit or Vegetable Extracts

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

In this analysis, the presence of Peonidin-3-O-Glucoside was confirmed in two out of four extracts. The peaks were symmetrical and retained beyond the dead volume.

Due to the MS detection and comparison of the retention time, it was possible to find the peak for Peonidin-3-O-Glucoside among many peaks with similar  $m/z$  values present in the A1 extract. The method after validation can be used for quality control of commercial fruit extracts as well in studies of bioactivities of this important class of compounds.



Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

**MicroSolv Technology Corporation**

8 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

## Peak:

Peonidin 3-O-glucoside 463 m/z [M+]

## Method Conditions

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

**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:

T  
i  
m  
e  
(  
%  
B  
i  
n  
u  
t  
e  
s  
)  
1  
0  
5  
8  
4  
0  
8  
6  
0  
1  
7  
5

**Post Time:** 3 minutes

**Injection vol.:** 1µL

**Flow rate:** 0.4 mL/minute

**Detection:** ESI - POS - Perkin Elmer, Flexar SQ 300 Mass Spectrometer

**Sample Preparation:** Four proprietary fruit or vegetable extracts were analyzed. Samples were marked A1 to A4.

**t<sub>0</sub>:** 0.4 minutes

**Note:** Anthocyanins are plant pigments and have recently been used as natural colorants in food products instead of synthetic dyes used in the food industry, which have been suspected to cause adverse neurological effects. The rapidly growing food and beverage market demands more and more of plant pigments. Also the main secondary metabolites in black rice are Anthocyanins, mainly Cyanidin-3-O-glucoside and Peonidin-3-O-Glucoside.

Printed from the Chrom Resource Center  
Copyright 2024, All Rights Apply  
**MicroSolv Technology Corporation**  
9158 Industrial Blvd. NE, Leland, NC 28451  
tel. (732) 380-8900, fax (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com

**Attachment**

**No 296 Peonidin-3-Glucoside pdf** 0.3 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2024, All Rights Apply

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)