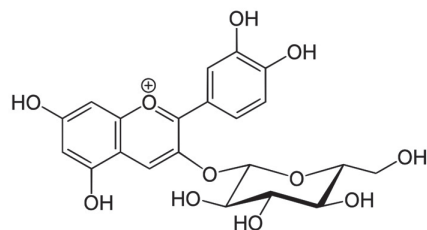
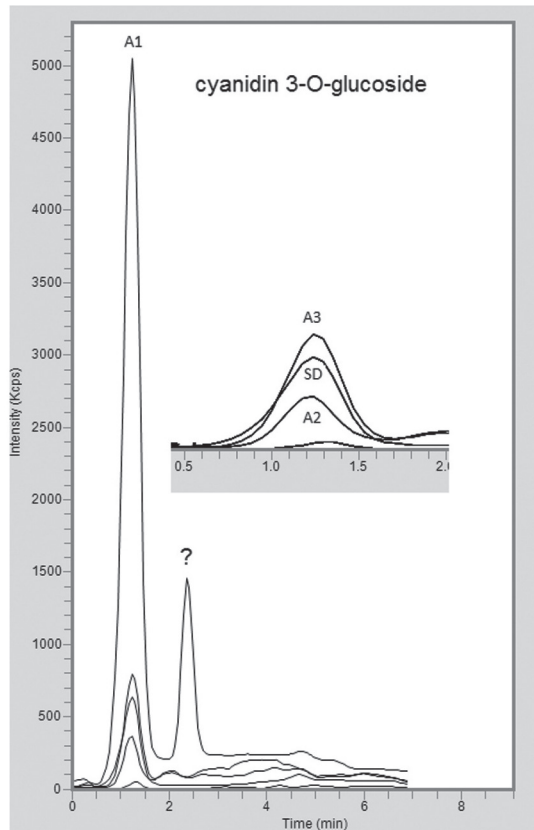


Cyanidin-3-O-Glucoside

Analysis in fruit and vegetable extracts



Cyanidin 3-O-glucoside

Note: Anthocyanins are present in fruits and vegetables. They are natural colorants (red color). Recent studies show that in addition to antioxidant properties they exhibit anticancer activity¹. Also anthocyanins have benefits for the prevention of obesity and diabetes.

[1] Pei-Ni Chen, Shu-Chen Chu, Hui-Ling Chiou, Wu-Hsien Kuo, Chui-Liang Chiang, Yih-Shou Hsieh, Cancer Letters, Volume 235, Issue 2, 28 April 2006, Pages 248-259

Method Conditions

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

Catalog No.: 69020-05P-2

Dimensions: 2.1 x 50 mm

Mobile Phase: A: DI H₂O / 0.1% formic acid (v/v)
B: Acetonitrile / 0.1% formic acid (v/v)

Gradient:	time (min.)	%B
	0	15
	4	80
	6	80
	7	15

Post Time: 3 min

Injection vol.: 1µL

Flow rate: 0.4 mL/min

Detection: ESI - POS - Perkin Elmer, Flexar SQ 300 mass spectrometer

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

Peak: Cyanidin 3-O-glucoside 449 m/z [M⁺]

t₀: 0.4 min

Discussion

When the Cogent Phenyl Hydride column was used for analysis of proprietary fruit or vegetable extracts, the presence of cyanidin-3-O-glucoside was confirmed in three out of four extracts. The peaks were symmetrical and retained beyond the dead volume.

The method after validation can be used to quality control of commercial fruit extracts as well in studies of bioactivities of this important class of compounds.