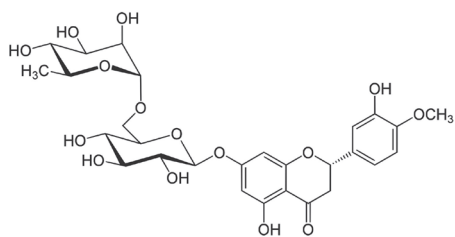
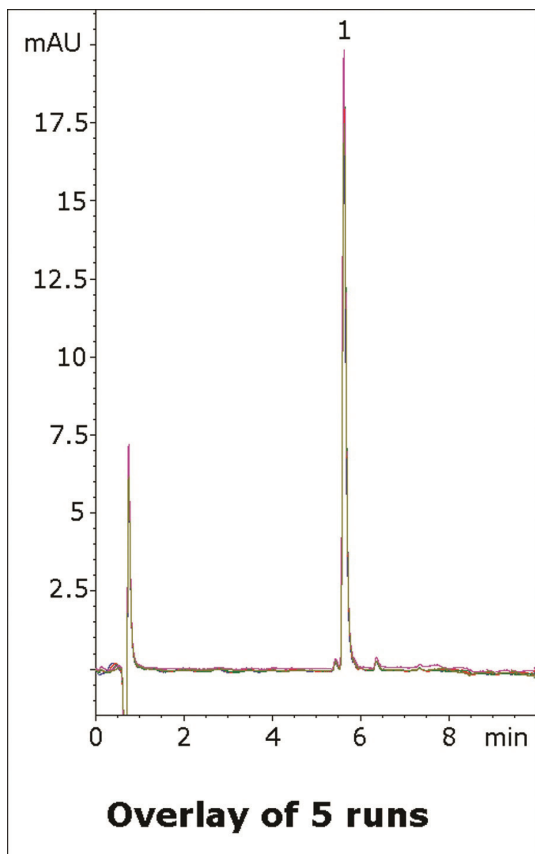


Hesperidin

LC-MS compatible method with high efficiency column



Hesperidin

Note: Hesperidin is a naturally occurring glycoside polyphenol that is thought to have antioxidant properties. Studies suggest it may have a number of pharmaceutical applications due to possible anti-inflammatory, anti-cancer, and cholesterol and blood pressure lowering effects. Its name comes from the word "hesperidium", which is the type of fruit produced by citrus trees.

Method Conditions

Column: Cogent Bidentate C18 2.0, 2.2µm, 120Å

Catalog No.: 40218-05P-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	10
	1	10
	9	70
	10	10

Post Time: 5 min

Injection vol.: 1µL

Flow rate: 0.3mL/min

Detection: UV 285nm (Perkin-Elmer instrument)

Sample: 100 ppm hesperidin reference standard in 1:1 DMSO: methanol diluent

Peak: 1. Hesperidin

t₀: 0.6 min

Discussion

This method for analysis of hesperidin produces an excellent analyte peak and shows separation from what appears to be two impurity peaks. The gradient method is LC-MS compatible and can be applied to many types of hesperidin-containing samples such as citrus fruit extracts. The overlay of five runs shown in the figure illustrates the run-to-run reproducibility of the data.