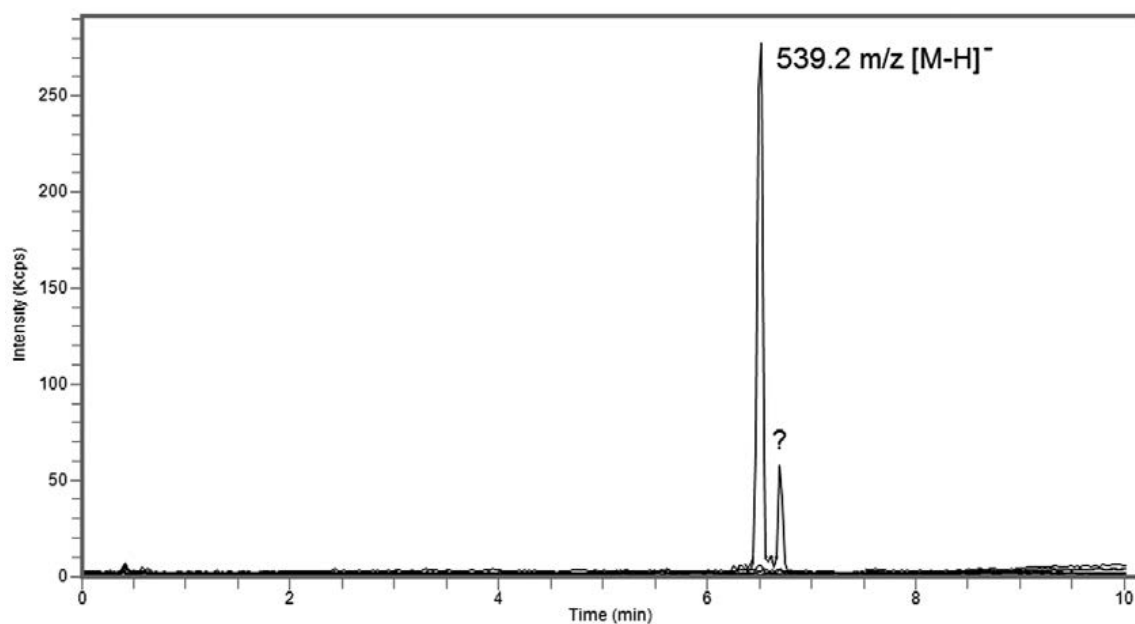


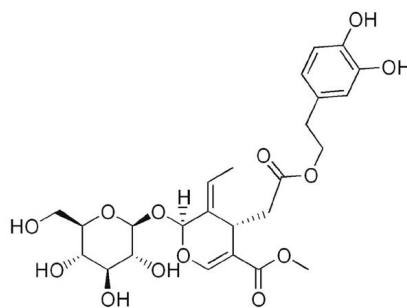
Oleuropein in Olive Leaves Extract Analyzed with LCMS - AppNote

High Efficiency Using a near-UHPLC Column for Oleuropein

In this Application Note, the Analyte Peak is symmetrical and well Retained while the results were very reproducible ($\%RSD = 0.06$ for Retention Times). This Method can be used to analyze and evaluate the extraction of Olive Leaves.

According to the literature, Olive Leaf Extracts should contain the following compounds: Oleuropein, Hydroxytyrosol, Verbascoside, Apigenin, Luteolin-7-O-Glucoside, and Tyrosol [1].





Oleuropein

Peak:

Oleuropein 539.2 m/z [M-H]⁻

Method Conditions

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

Catalog No.: [40218-05P-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	5
3	15
4	15
6	30
7	30
11	95
14	95

15	5
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Post Time: 3 minutes

Injection vol.: 1 μ L

Flow rate: 0.3mL / minutes

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

Sample Preparation: Commercial Olive Leaves Extract was dissolved in DI Water at a concentration 10ppm.

t₀: 0.6 minutes

Note: Olive Leaves are food byproducts (after pruning of Olive Trees) which are full of bioactive compounds. These compounds are potent polyphenols, which show antibacterial, antiviral, anti-cancer, anti-inflammatory, and antioxidant activities. Different extraction procedures are used for selective extraction of polyphenols from olive leaves. An analytical method to monitor and evaluate the resulting extract is needed.

[1] J.E. Hayes, P. Allen, N. Brunton, M.N. O'Grady, and J.P. Kerry, *Food Chemistry*, 126, (2011) 948-955.



Attachment

No 284 Oleuropein in Olive Leaves Extract Analyzed with LCMS pdf 0.2 Mb [Download File](#)