# MICROSOLV

Oleuropein in Olive Leaves Extract Analyzed with HPLC - AppNote

Separation from Matrix Peaks

The main peak (Oleuropein) was observed to be well Separated from matrix components in this HPLC based approach. This Method is useful for analysts that are not using LCMS and therefore need good Chromatographic Separation in order to perform accurate Quantitation. The matrix Peaks do not co-elute with the main Peak, which is required for UV-based Methods. The Method is highly reproducible (5-run overlay shown in the Figure below).

Overlay of 5 runs
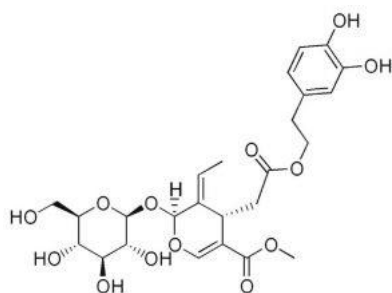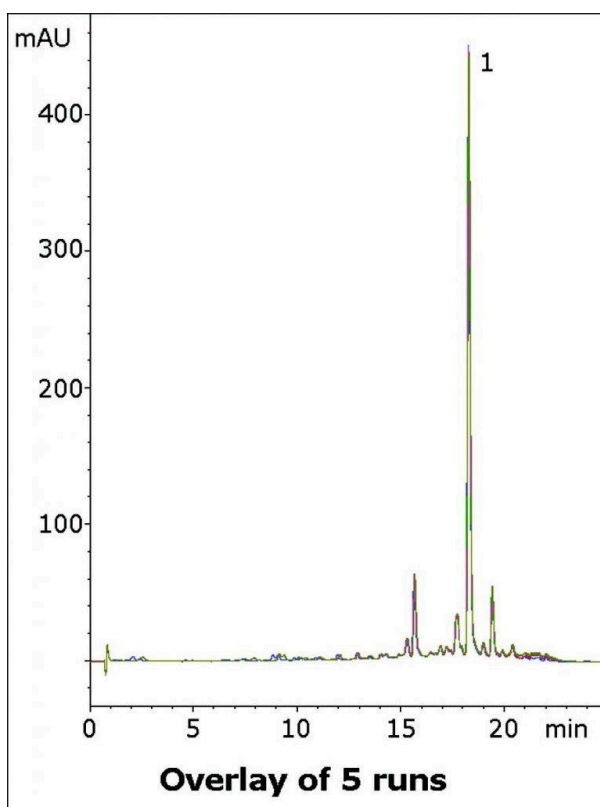
Oleuropein

Peak:

Oleuropein

Method Conditions
Column: Cogent Bidentate C18 2.o™, 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	5
19	25
20	25
21	5

Post Time: 5 minutes
Injection vol.: 1µL
Flow rate: 0.3mL / minutes
Detection: UV @ 254nm
Sample Preparation: 10.0mg Olive Leaf Extract was added to 1mL volumetric flask. It was then diluted to mark with 50:50 Solvent A / Solvent B diluent. Then it was filtered with a 0.45µm Nylon Syringe Filter (MicroSolv Tech Corp.).
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.

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Attachment

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