Supporting Information

The Dual Edema-Preventing Molecular Mechanism of the *Crataegus* Extract WS 1442 Can Be Assigned to Distinct Phytochemical Fractions

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Materials and Methods

GC-MS analysis of fatty acids in fractions E-8/4, E-8/5, and E-8/6

To a solution of fractions E-8/4 to E-8/6 (0.3 mg) in n-hexane (0.1 mL) and anhydrous MeOH (5 μL), TMSCHN$_2$ (5 μL; 10 % in n-hexane, 0.6 mol/L) was added under an argon atmosphere. The solution was allowed to stand in a sealed HPLC vial at room temperature for 15 min. The reaction was quenched by adding AcOH (5 μL), and dried under N$_2$ flow. Aliquots of 1 μL of the 3 samples were analyzed by GC-EI-MS analysis on a capillary DB5 column (30 m x 0.25 mm i.d., 0.5 μm film thickness; Agilent). The following temperature gradient was used: 60°C for 1 min, then 10°C/min to 260°C, then 260°C for 10 min, with helium as the carrier gas at 0.5 bar. Injector and detector temperatures were at 240°C and 260°C, respectively. The samples were injected in splitless mode. Compounds were identified by matching their EI-MS spectra with the NIST (2002) library.
Figure Legends

A

B

C

palmitic acid

stearic acid

palmitic acid

stearic acid

myristic acid

palmitic acid

stearic acid
Fig. 1S

GC-MS analysis (TIC) of fatty acids in fractions E-8/4 (A), E.8/5 (B), and E-8/6 (C). Fatty acids were detected as methyl esters.

Fig. 2S

$^1$H NMR spectra (500 MHz, DMSO-$d_6$) of hyptatic acid A (A) and fraction E-8/5 (B).
Fig. 3S

$^1$H NMR spectra (500 MHz, DMSO-$d_6$) of fractions E-8/4 (A) and E-8/6 (B).
Confluent HUVECs were pretreated for 30 min with palmitic acid, stearic acid, or hyptatic acid A [5 µg/mL]. Changes of [Ca^{2+}], were detected by fluorescence microscopy using Fura-2-AM [2 µM] in a static tempered system (37°C). Thrombin [1 U/mL] was added exactly at time point t = 1 min after initiating the experiment. One representative experiment out of three is shown.