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Supporting Information

Isomeric C$_{12}$-Alkamides from the Roots of *Echinacea purpurea* Improve Basal and Insulin-Dependent Glucose Uptake in 3T3-L1 Adipocytes

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Fig. 1S Adipocyte differentiation of DI protocol-treated 3T3-L1 preadipocytes with DMSO, 100 μg/mL DCM root extract of *Echinacea purpurea*, 100 μg/mL fraction A, 100 μg/mL fraction D, 30 μM compounds 1/2, and 1 μM Rosi, respectively.
Fig. 2S Effect of compounds 3 and 4 at 30 μM concentration on insulin-dependent glucose uptake. DMSO (vehicle) was set to 1 and the results normalized to this, while Rosi (1 μM) was the positive control. All values are expressed as mean ± SD of three independent experiments in triplicates. * p < 0.001 indicates significance relative to DMSO in each treatment.
**Fig. 3S** HR-ESI-MS spectrum of compounds 1/2 with a quasi-molecular precursor ion at m/z 262.2176 [M + H]^+. The peak at m/z 545 corresponds to the adduct [2M + Na]^+.
Fig. 4S MS/MS spectrum of the quasi-molecular precursor ion (m/z 262 [M + H]+) of compounds 1/2.
**Fig. 5S** $^1$H NMR spectrum of compounds 1/2.
Fig. 6 $^1$H NMR spectrum of compounds 1/2 expanded in the region of ≈ 0.4–1.5 ppm.
Fig. 7S $^1$H NMR spectrum of compounds 1/2 expanded in the region ≈ 1.4–3.0 ppm.
Fig. 8S $^1$H NMR spectrum of compounds 1/2 expanded in the region $\approx 2.6$–$3.8$ ppm.
Fig. 9S $^1$H NMR spectrum of compounds 1/2 expanded in the region $\approx 5.15$–$6.40$ ppm.
Fig. 10S $^1$H NMR spectrum of compounds 1/2 expanded in the region $\approx 6.94$–$7.34$ ppm.
Fig. 11S $^1$H–$^1$H COSY spectrum of compounds 1/2.