**Figure 1:** Effects of the 10 *Gundelia tournefortii* (GT) fractions (A–J) on cell viability based on the MTT assay. L6-GLUT4myc cells (20,000 cells/well) exposed to GT fractions for 24 h. Values represent the mean ± SEM (% of untreated control cells) of three independent experiments conducted in triplicate.

**Figure 2:** Glucose transporter type 4 (GLUT4) translocation to the plasma membrane. To evaluate GLUT4 translocation, L6-GLUT4myc cells (150,000 cells/well) were exposed to GT fractions (A–J) for 23 h. Serum depletedcells were either treated without (-) or with (+) 100 nM insulin for 20 min at 37°C, and the density of surface *myc*-tagged GLUT4 was quantified using an antibody coupledcolorimetric assay. Values represent the mean ± SEM (relative to untreated control cells) of three independent experiments conducted in triplicate.

**Figure 3:** Chemical structure of all anti-diabetic and glucose transporter type 4 (GLUT4) translocation enhancer phytochemicals detected among the 10 *Gundelia tournefortii* fractions.

**Figure 1, Supplementary material:** Gas chromatography-mass spectrometry of 10 *Gundelia tournefortii* fractions (1–10). Major peaks are labeled with the compounds identified. Magnified area indicates the region of elution of some compounds.