Supporting Information

The Total Phenolic Fraction of *Anemarrhena asphodeloides* Inhibits Inflammation and Reduces Insulin Resistance in Adipocytes via Regulation of AMP-Kinase Activity

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Methods

Cytotoxicity test

Cytotoxicity was evaluated using 3-(4,5)-dimethylthiahiazo(-z-y1)-3,5-di-phenytetrazoliumromide (MTT) assay. Briefly, adipocytes were cultured in serum-free DMEM containing 0.5% BSA in the presence of TPAA (1, 10, 50, 100 μg/mL) for 4 or 24 h at 37 °C. After removal of medium, 20 μL of MTT solution (5 mg/mL in PBS) was added to each well and cells were incubated at 37 °C for 4 h. The medium was replaced with 150 μL DMSO, and the plates were shaken for 15 min to dissolve the formazan crystals. The absorbance at 570 nm was measured. The results were calculated as follows: Cell viability (%) = (A570 sample – A570 blank)/(A570 control – A570 blank)×100.

Supplementary figures

Fig. 1S HPLC profiles of TPAA. TPAA was analysed by an Agilent Series 1200 HPLC system, ODS column length 450 mm, diameter 4.6 mm, mobile phase composition MeOH-H2O-(C2H5)3N-HAC (40:60:0.2:0.4, v/v/v/v), flow rate 1.0 mL/min, wavelength 258 nm. Peak 13 was mangiferin.

Fig. 2S The effect of TPAA on cell viability in adipocytes. Cells were incubated with TPAA for 4 h (A) or 24 h (B), then cell viability was determined by MTT. Results were expressed as the mean ± SD (n=6). * p<0.05 vs control.