The TRPA1 agonist cinnamaldehyde decreases adipogenesis in 3T3-L1 cells more potently than the non-agonist structural analog cinnamyl isobutyrate

Julia K. Hoi[1], Barbara Lieder[1], Beatrix Liebisch[1], Christiane Czech[1], Joachim Hans[2], Jakob P. Ley[2], Veronika Somoza[3*]

[1] Department of Physiological Chemistry, Faculty of Chemistry, University of Vienna, Althanstraße 14, Vienna, Austria

[2] Symrise AG, Muehlenfeldstraße 1, Holzminden, Germany

[3] Leibniz Institute for Food Systems Biology at the Technical, University of Munich, Chair of Nutritional Systems Biology, Technical University of Munich, Lise-Meitner-Strasse 34, 85345 Freising, Germany

Figure 1

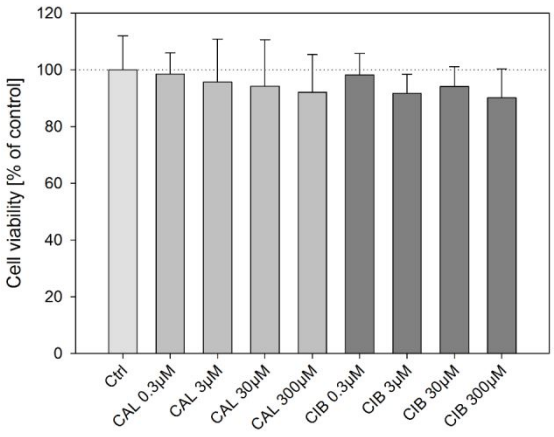

Figure S1. Cell viability after a 90-min treatment with cinnamaldehyde (CAL) and cinnamyl isobutyrate (CIB) in concentrations of 0.3 – 300 µM. Values are displayed as mean ± SD in percent compared to the control (buffer with 0.1 % ethanol). n = 4-5 (tr = 2-3).

Figure 2

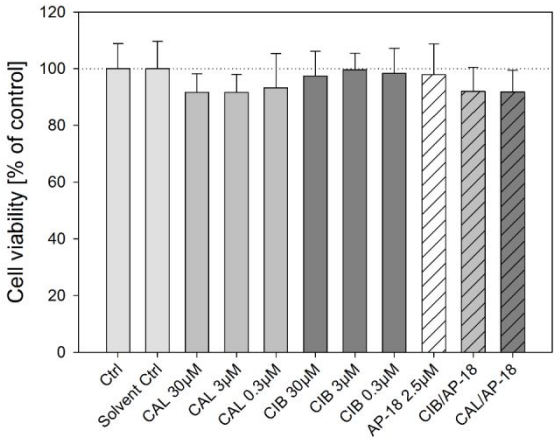

Figure S2. Cell viability after a 90-min treatment with cinnamaldehyde (CAL) and cinnamyl isobutyrate (CIB) in concentrations of 0.3 – 30 µM as well as AP-18 in a concentration of 2.5 µM with or without co-treatment of 30 µM CIB or CAL. Values are displayed as mean ± SD in percent compared to the control (buffer with 0.1 % ethanol). n = 3-4 (tr = 3-6).