**Supplemental Results**

*Drospirenone inhibits Dxm-induced preadipocyte differentiation and triglyceride accumulation*

An antiadipogenic effect of DRSP was observed when Dxm, instead of Cort, was used to differentiate 3T3-L1 cells. 3T3-L1 cells were grown until confluence and then cultured for 7 days with various DRSP concentrations, and lipid accumulation was examined after oil red O staining. Microscopic examination showed that a 7-day-exposure dramatically decreased the number and size of lipid droplets as compared to control cells (Suppl. Fig. 1A, left panel). Consistent with this result, DRSP induced a dose-dependent decrease in 3T3-L1 cell triglyceride content, that was detectable at 100 nmol/L DRSP, maximal at 10 μmol/L and with a half-maximal effect at approximately 1 μmol/L (Suppl. Fig. 1A, right panel). Accordingly, DRSP induced a sharp, dose-dependent decrease in lipoprotein lipase (LPL), adiponectin, and resistin mRNA levels (Suppl. Fig. 1B).

**Legend to Suppl. Figure 1**

DRSP induces a dose-dependent decrease in lipid accumulation and fat cell markers mRNA expression during 3T3-L1 adipose conversion. 3T3-L1 cells were cultured from confluence until day 7 in the absence or presence of the indicated DRSP concentrations, and then examined for morphological, biochemical and molecular parameters. A. Left panel: Oil red O staining shown at a microscopic level (scale bar: 70 μm). Right panel: Quantification of 3T3-L1 cell triglyceride content. B. Steady state levels of several adipose-specific transcripts. Significance of ANOVA is given in parentheses at the top of each panel; significance of post-hoc tests: *, p<0.05; ***, p<0.001; DRSP-treated versus control 3T3-L1 cells.
Suppl. Fig. 1