Effects of quercetin on adipogenesis-related transcription factors in differentiated adipocytes from normal samples stimulated with either cigarette smoke extract (CSE) or H2O2. Cells from normal patients were treated with quercetin (100 µM) for the first three days of a 10-day period of adipogenesis in adipogenic medium containing 10 µM rosiglitazone alone or combined with 2% CSE or 10 µM H2O2. After 10 days, the cell lysates were subjected to western blotting analysis for PPARγ, C/EBPα and C/EBPβ protein expression (A). The experiments were performed in triplicate with cells from three different normal donors. Quantification of PPARγ, C/EBPα and C/EBPβ by densitometry, normalized to the β-actin levels in the same samples, is shown (B). The data in the columns are the mean relative density ratios ± SD of three experiments in cells from three different normal samples. The assays were performed at least three times in triplicate with cells from three different normal samples, and expressed as the differences between the quercetin-treated and -untreated cells (*P < 0.05) in each control, CSE or H2O2 stimulated condition.