

**SUPPLEMENTARY FIG. S4.** Sulforaphane protects cells from aldosterone-induced DNA damage. Cells were stained for DSBs with an antibody against  $\gamma$ -H2AX (green) and nuclear dye DAPI (blue). (A) The bottom row represents the overlay of Nrf2-positive nuclei (FITC, green) and nuclear dye DAPI (blue). Shown are representative pictures of control cells and aldosterone- (10 and 100 nM) and sulforaphane ( $2 \mu M$ )-treated cells. Pictures were taken by a TCS SP5 laser scanning confocal microscope. Quantifications were done after 4 h (B) and 24 h (C) treatment by measuring gray values of ~150 cells per treatment with ImageJ. (D) Representative pictures of nuclei of cells subjected to the Comet Assay procedure. Left picture: nucleus of an untreated cell, middle and right picture: nuclei of cells treated with aldosterone with different grades of DNA damage. Effects of sulforaphane on aldosterone-induced DNA damage measured by comet assay in LLC-PK1 cells after 4 h (E) and 24 h (F). Shown is the induction of DNA damage. (B, C, E, F) Shown are mean values  $\pm$  SEM, \* $p \le 0.05$  versus the control group, \* $p \le 0.05$  versus the respective treatment with aldosterone alone, tested by ANOVA with subsequent post-hoc comparisons by Scheffé.