



SUPPLEMENTARY FIG. S6. Cx32 inhibition attenuates H24R4-induced cell mitochondrial injuries and apoptosis of NRK52E cells. Before H24R4 exposure, cells were incubated with 2APB (gap junction inhibitor, 25 μ M) or DPI (an inhibitor of NADPH oxidase, 1 μ M) or NAC (a ROS scavenger, 10 mM) for 1 h, SN50 (a selective inhibitor of NF- κ B, 20 μ M) or Gap27 (Cx32 peptide, 100 μ M) for 24 h, PFT- α (a selective inhibitor of p53, 10 μ M) or Cx32-siRNA (50 nM) or vehicle (same volume of DMSO) for 48 h. (A, B) Effects of several reagents on HK-2 and NRK-52E cell growth, relative LDH release. (C) ‘Parachute’ dye-coupling assay was used to determine effects of 2-APB, Gap27, and Cx32-siRNA on decreasing GJ function (scale bar 50 μ m). Function of GJ is demonstrated by the spread of GJ-permeable calcein-AM (white arrow), and in contrast CM-Dil is impermeable (red arrow). (D, E) Effects of 2APB, Gap27, and Cx32-siRNA on HK-2 cell growth and relative LDH release. (F, G) NRK52E cell apoptotic rates were detected by flow cytometry as described in the Methods and Materials section. Data are presented as mean \pm SE ($n=4$). * $p < 0.05$ compared with control group; # $p < 0.05$ versus H24R4 group. $\phi p < 0.05$ compared with Cx32-NC+H24R4 group in (B–E). 2-APB, 2-aminoethoxydiphenyl borate; DPI, diphenyleneiodonium chloride; NAC, N-acetyl cysteine; NRK52E, rat kidney tubular epithelial cell; PFT- α , pifithrin- α .