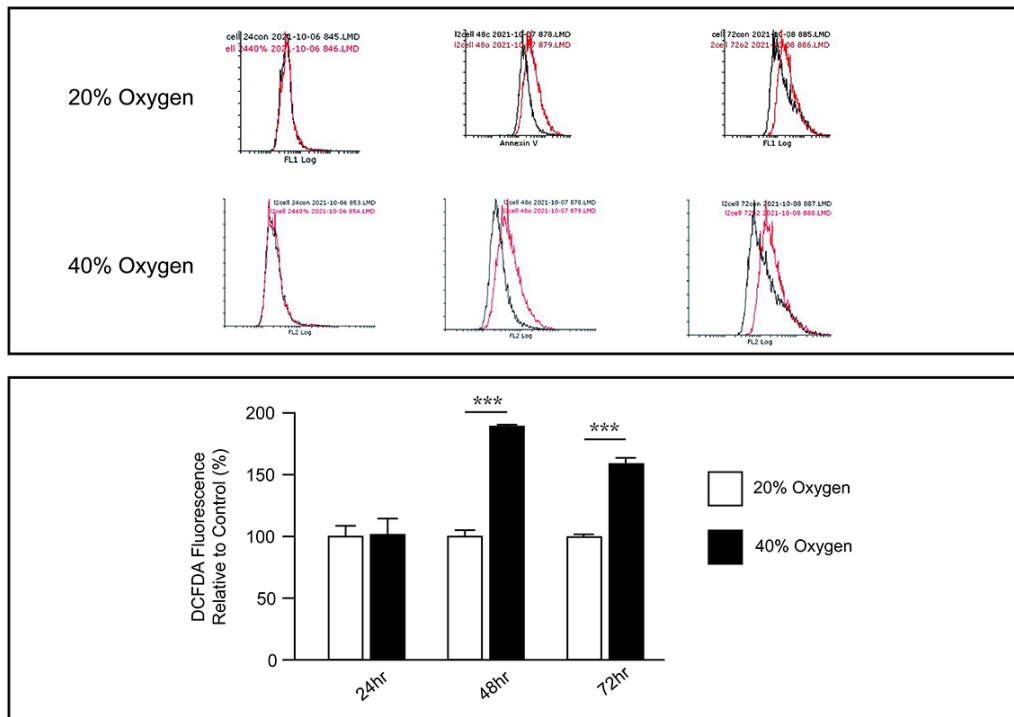
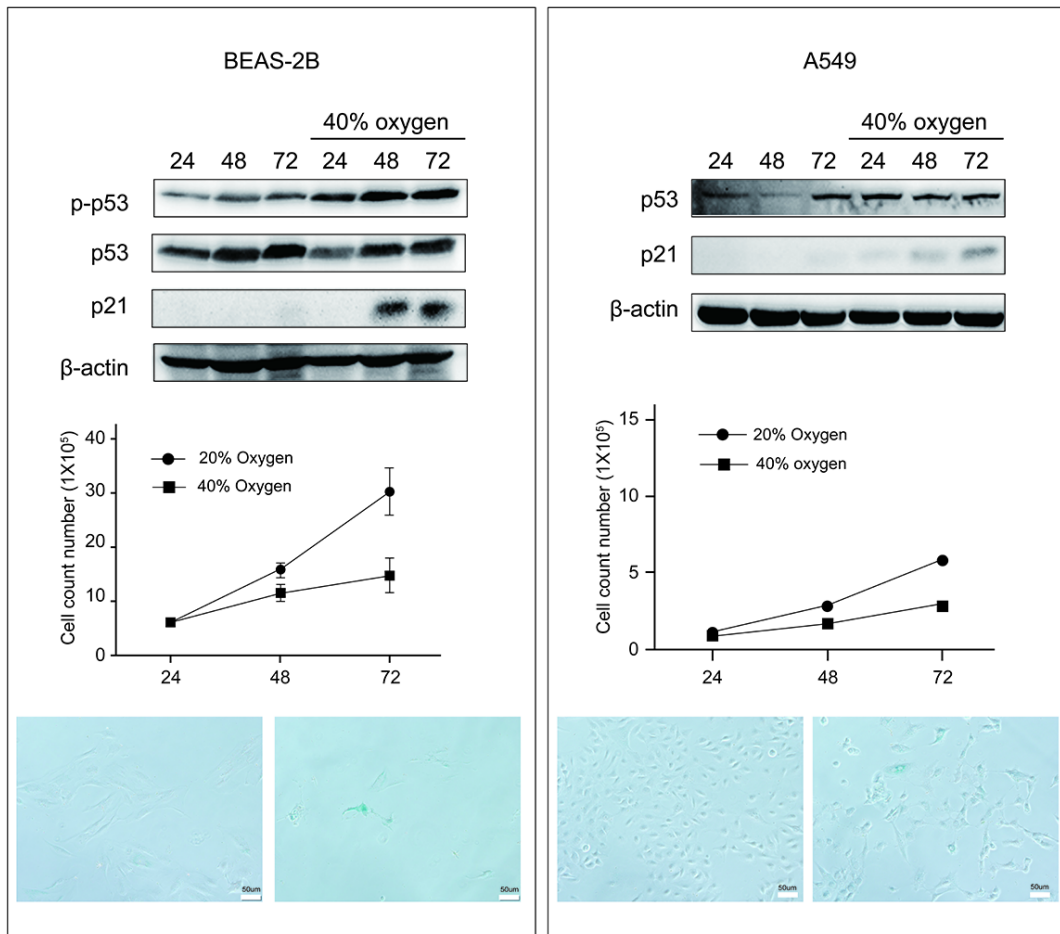


Supplemental figure 1



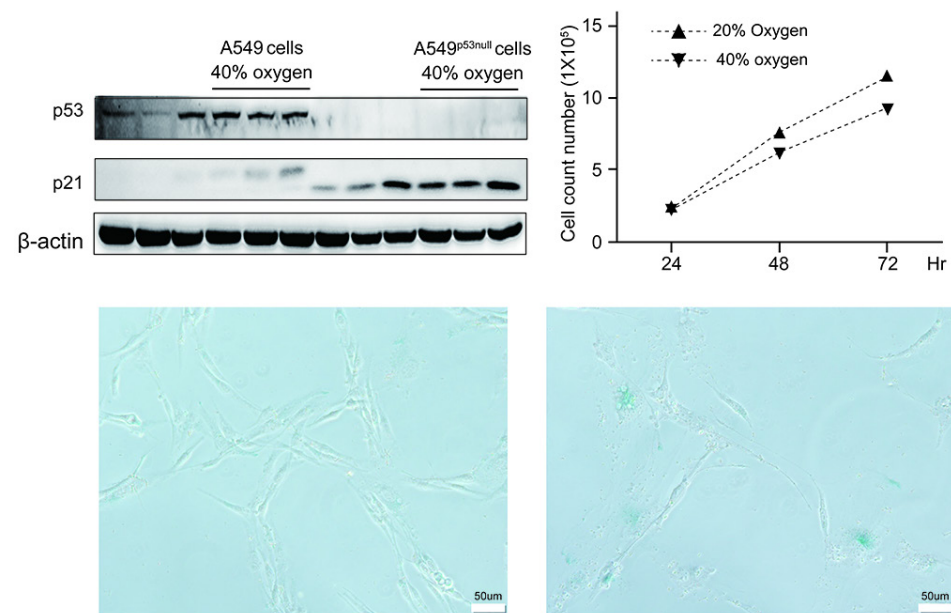
Supplemental Figure 1. Forty percent oxygen exposure induced oxidative stress in L2 cells. Intracellular ROS were detected using CM2-DCFDA fluorescence in L2 cells following 40% oxygen exposure for durations ranging from 24 to 72 hours. Data are shown as mean \pm SEM from three independent experiments. Statistical significance is indicated by asterisks: * $P < 0.05$, ** $p < 0.01$ and *** $p < 0.001$.

Supplemental Figure 2



Supplemental Figure 2. Forty percent oxygen exposure induced senescence in BEAS-2B cells and A549 cells. The upper panel shows a representative western blot analysis indicated protein expression under 20% and 40% oxygen concentrations and various exposure durations. The Middle panel displayed cell counting data of BEAS-2B cells and A549 cells in various treatment groups. The lower panel illustrates senescent cells of BEAS-2B cells and A549 cells are detected by β -galactosidase staining under 40 % oxygen exposure.

Supplemental figure 3



Supplemental Figure 3. A549 $p53^{null}$ cells exhibited senescence following forty percent oxygen exposure. The upper-left panel displays a representative western blot analysis indicated protein expression in A549 $p53^{null}$ cells under 20% and 40% oxygen concentrations and various exposure durations. The upper-right panel presents the corresponding cell counting data for A549 $p53^{null}$ cells under the same 20% and 40% oxygen exposures and durations. The lower panel illustrates the detection of senescent A549 $p53^{null}$ cells via β -galactosidase staining following exposure to both 20% and 40% oxygen.