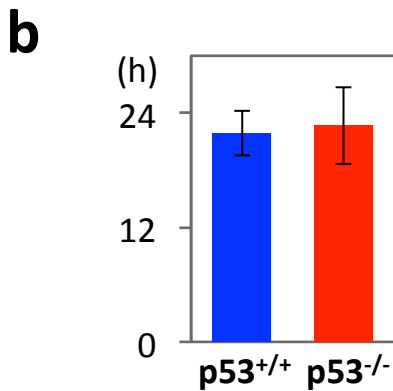
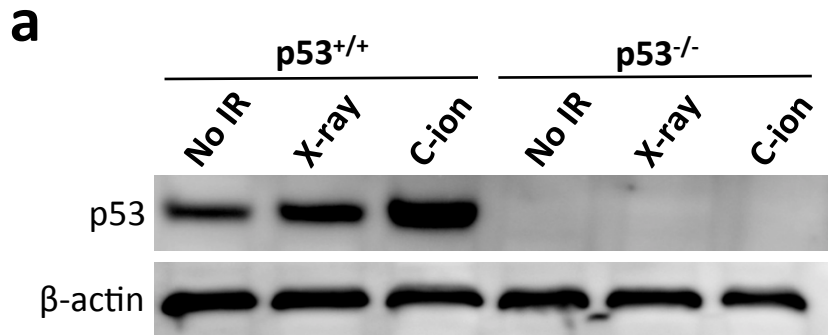


Supplementary Figure S1



Supplementary Fig. S1. Properties of the $p53^{+/+}$ and $p53^{-/-}$ cells.

(a) Immunoblots showing X-ray (4 Gy) or carbon-ion beam (C-ion; 1.5 Gy) irradiation-induced expression of p53 in $p53^{+/+}$ cells, but not in $p53^{-/-}$ cells at 1 h post-irradiation. IR, irradiation.

(b) The population doubling times of the $p53^{+/+}$ and $p53^{-/-}$ cells. Cells were cultured in 100 mm dishes and passaged at a $5\times$ dilution every 3 days. The number of cells was counted at the time of passage and the population doubling time calculated. Data are expressed as the mean \pm SD.