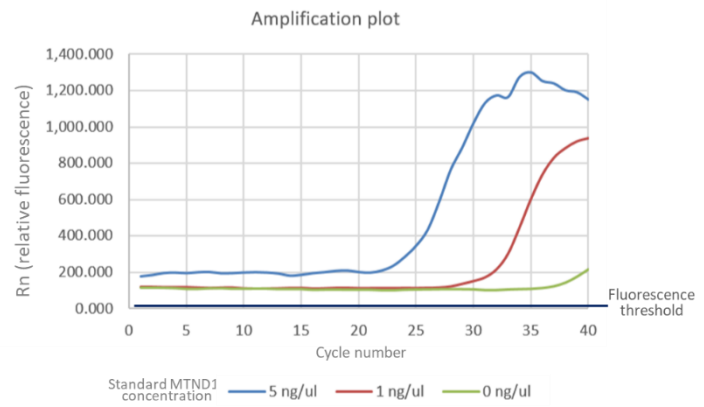
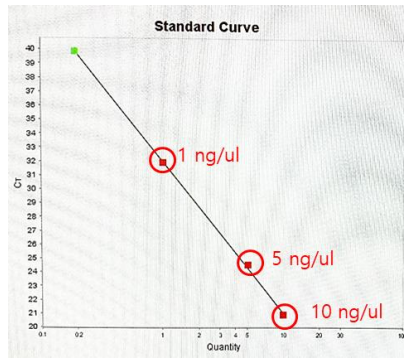
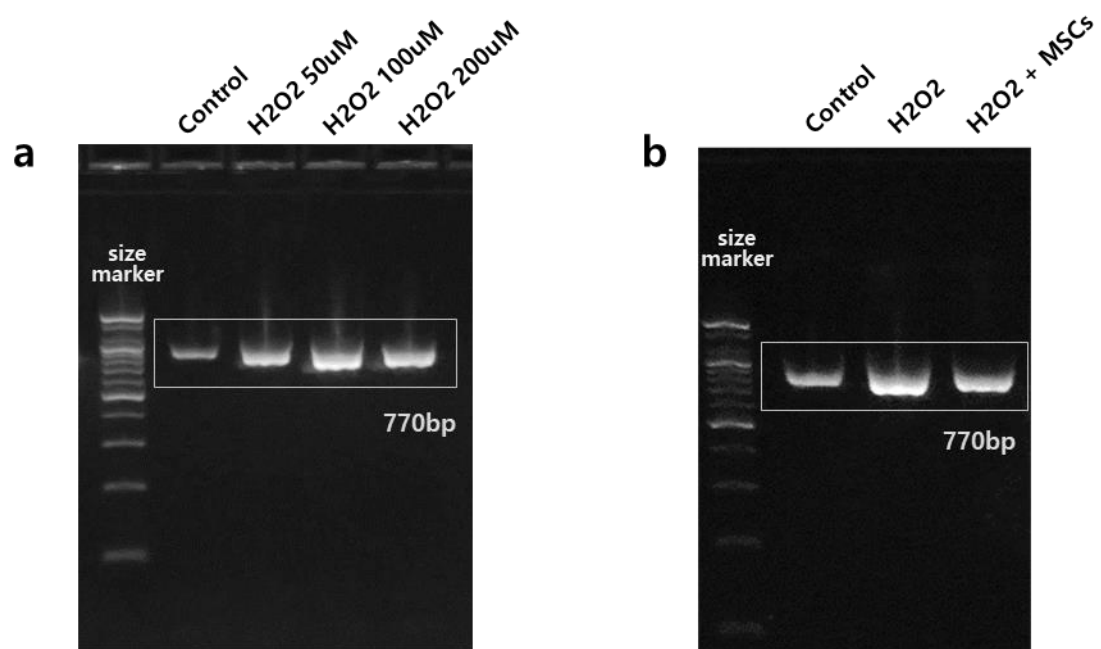


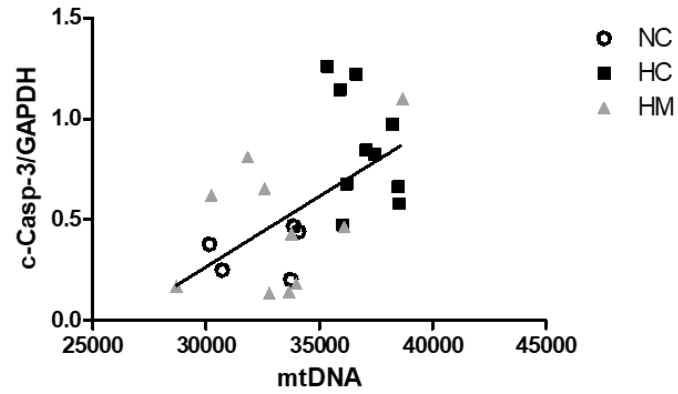
## Supplementary materials



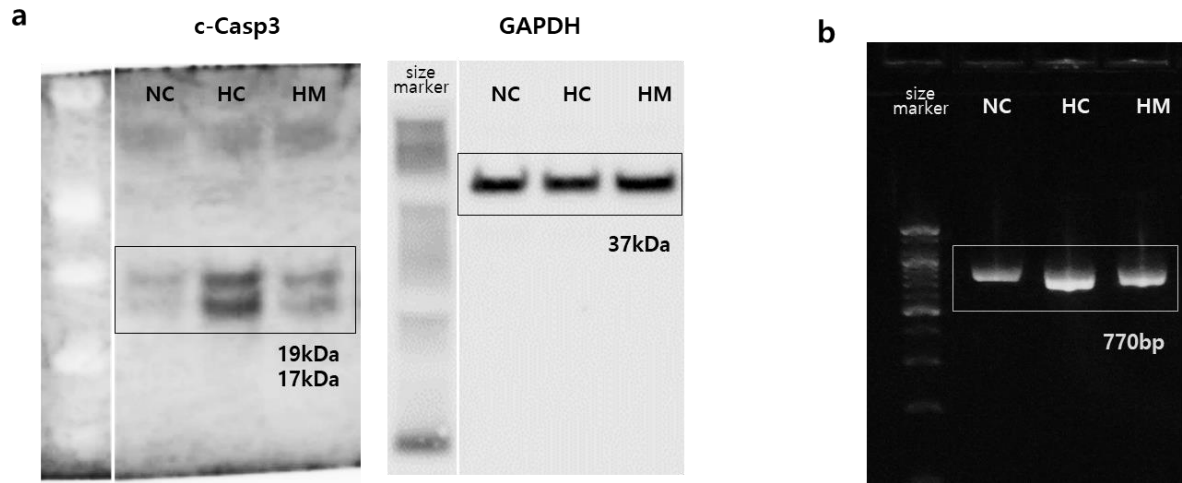
**Supplementary Figure S1.** The real time PCR standard curve for human MTND1 gene (left panel) and the amplification plot of the standard (right panel), shown in Figure 4.



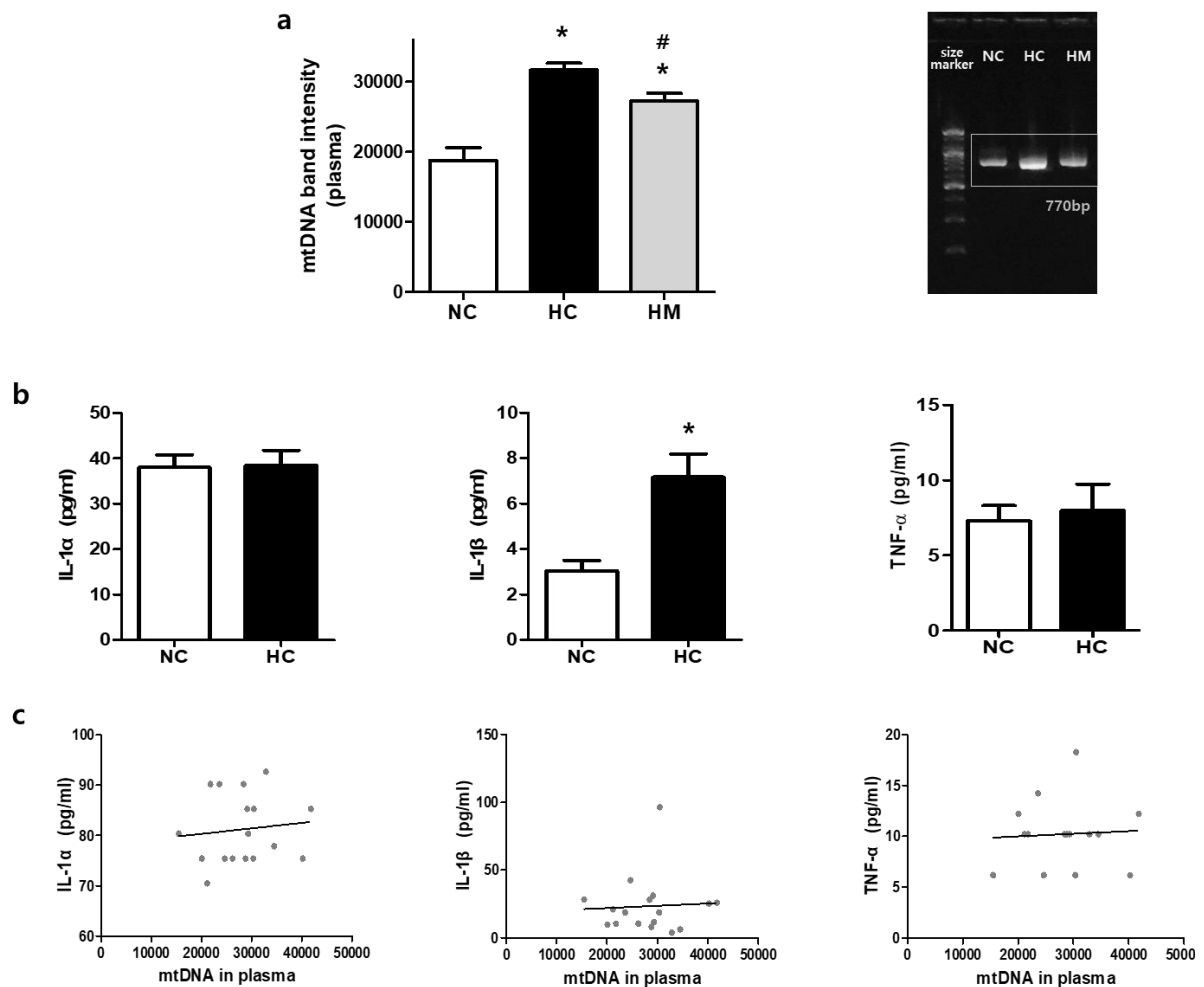
**Supplementary Figure S2.** Full-length PCR gels shown in Figure 1b and Figure 1d.



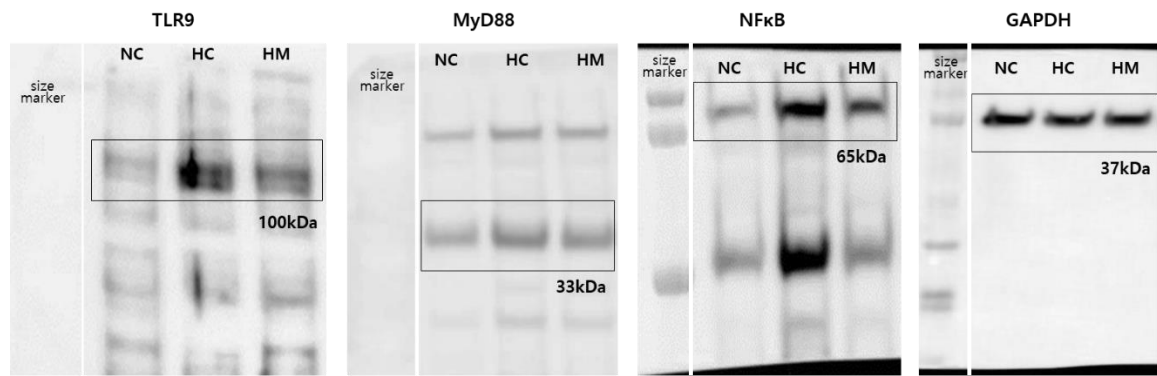
**Supplementary Figure S3.** Correlation analyses of levels of cleaved caspase-3 (c-Casp-3) and mtDNA release, shown in Figure 3 and b, in hyperoxia-induced lung injury in newborn rats. Y-axis: level of c-Casp-3, normalized to GAPDH, measured in lung tissues. X-axis: level of extracellular mtDNA measured in the BAL fluids ( $R^2 = 0.314$ ,  $P < 0.01$ ). (n = 6, 10 and 10 in NC group, HC group and HM group, respectively). NC, normal control group; HC, hyperoxia group; HM, hyperoxia with MSC transplantation group.



**Supplementary Figure S4.** Full-length Western blots shown in Figure 2a and full-length PCR gels shown in Figure 2b.



**Supplementary Figure S5.** Levels of extracellular mtDNA and inflammatory cytokines measured in plasma of newborn rats. (a) Level of extracellular mtDNA in plasma in NC, HC, and HM groups (n = 12, 14 and 18 in NC group, HC group and HM group, respectively). (b) Levels of inflammatory cytokines (IL-1 $\alpha$ , IL-1 $\beta$  and TNF- $\alpha$ ) in plasma of the HC group compared to the NC group (n = 18/ group) (c) and correlation analyses of levels of extracellular mtDNA and inflammatory cytokines (IL-1 $\alpha$ , IL-1 $\beta$  and TNF- $\alpha$ ) in hyperoxia-induced lung injury (HC) group (n = 18). Data are given as mean  $\pm$  SEM. \*P < 0.05 vs. NC. #P < 0.05 vs. HC. NC, normal control group; HC, hyperoxia group; HM, hyperoxia with MSC transplantation group.



**Supplementary Figure S6.** Full-length Western blots shown in Figure 3.