Supplementary Materials for

Anti-Inflammatory Effects of Idebenone Attenuate LPS-Induced Systemic Inflammatory Diseases by Suppressing NF-κB Activation

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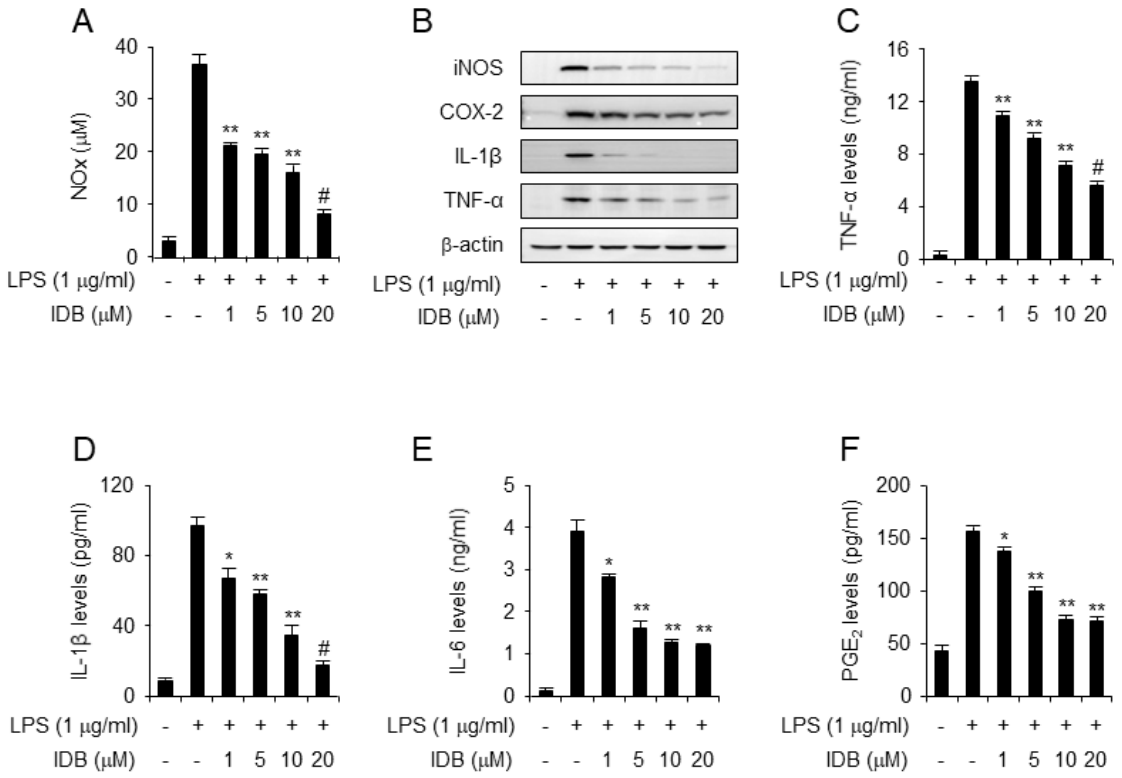

Supplementary Figure S1. Idebenone inhibits LPS–stimulated expression of proinflammatory mediators in J774A.1 cells. Idebenone inhibits LPS–induced production of NO metabolites, TNF–α, IL–1β, IL–6, and PGE_2 in J774A.1 cells. (A) NO metabolite secretion was assessed using Griess reagent. (B) Western blotting analysis was used to examined protein expression of inflammatory enzymes (iNOS, COX–2) and pro–inflammatory cytokines (IL–1β, TNF–α) in LPS–induced J774A.1 cells in the present or absence of various doses of idebenone (1, 5, 10, 20 μM), with β-actin as the loading control. Cells were pretreated with idebenone (1, 5, 10, 20 μM) for 2 h before LPS treatment (1 μg/mL). Cells were harvested after 18 h. The secretion of (C) TNF–α, (D) IL–1β, (E) IL–6, and (F) PGE_2 by LPS–stimulated J774A.1 cells treated with or without idebenone was assessed using ELISA. Graphs indicate the mean of three independent experiments. Statistical analysis was performed using paired two–tailed Student's *t*-test. *$p < 0.05$, , ** $p < 0.01$, and #$p < 0.001$.