

Figure S1. Effects of genistein and 17 $\beta$ -estradiol on H9C2 migration. Abbreviations are as in previous figures. An example of photograph of the wound of each time (time 0 and after 24 and 48 h), is shown. The images were taken at x4 magnification. The wound area and the percentage of healing were calculated for each time point.

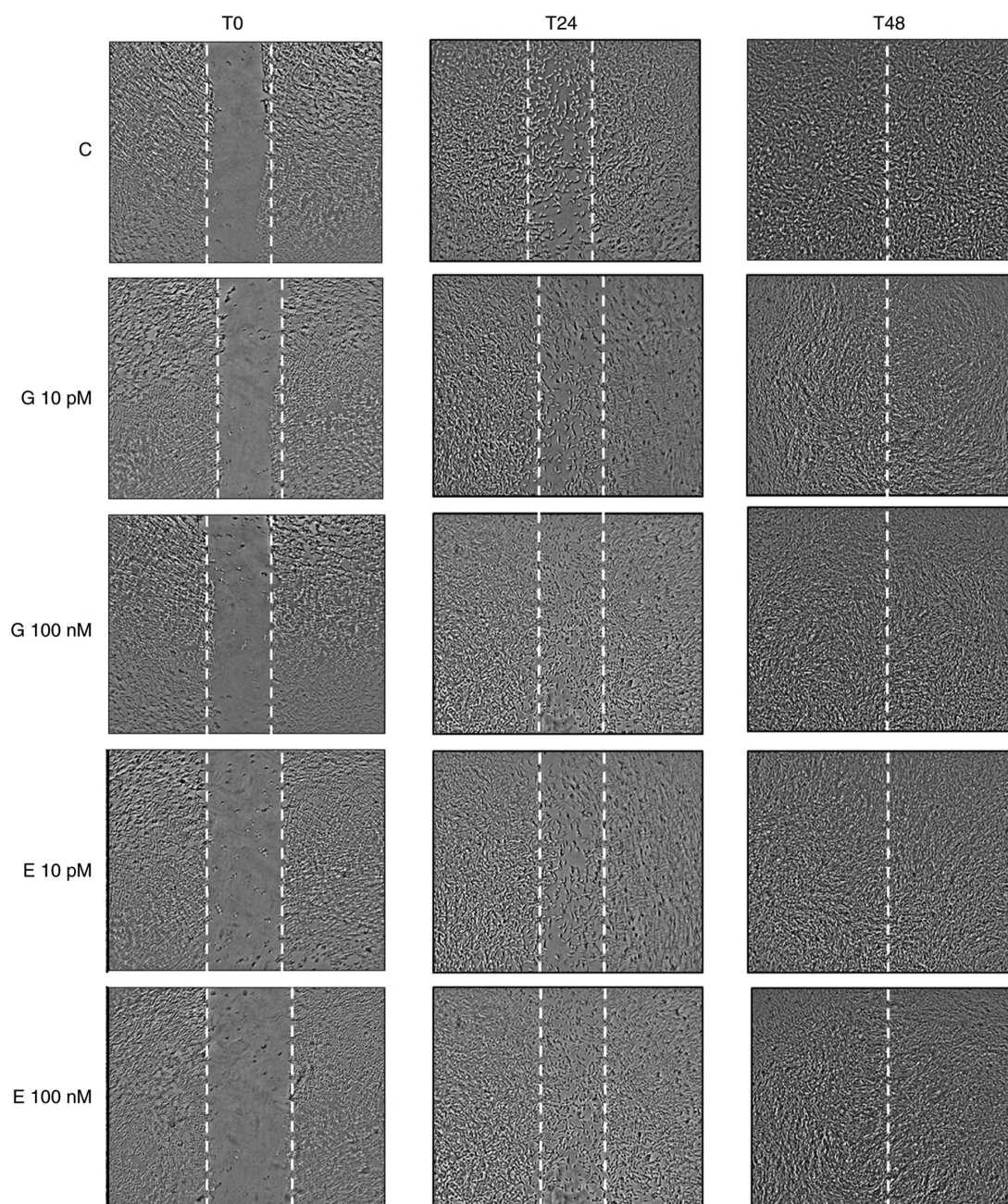


Figure S2. Effects of genistein and 17 $\beta$ -estradiol on cell cycle in H9C2 cultured in physiological (A) and peroxidative (B) conditions. Abbreviations are as in previous figures. Each panel shows an example of each experimental condition. The percentage of cell cycle apoptosis, G0/G1, S, and G2/M phase is indicated in each Figure.

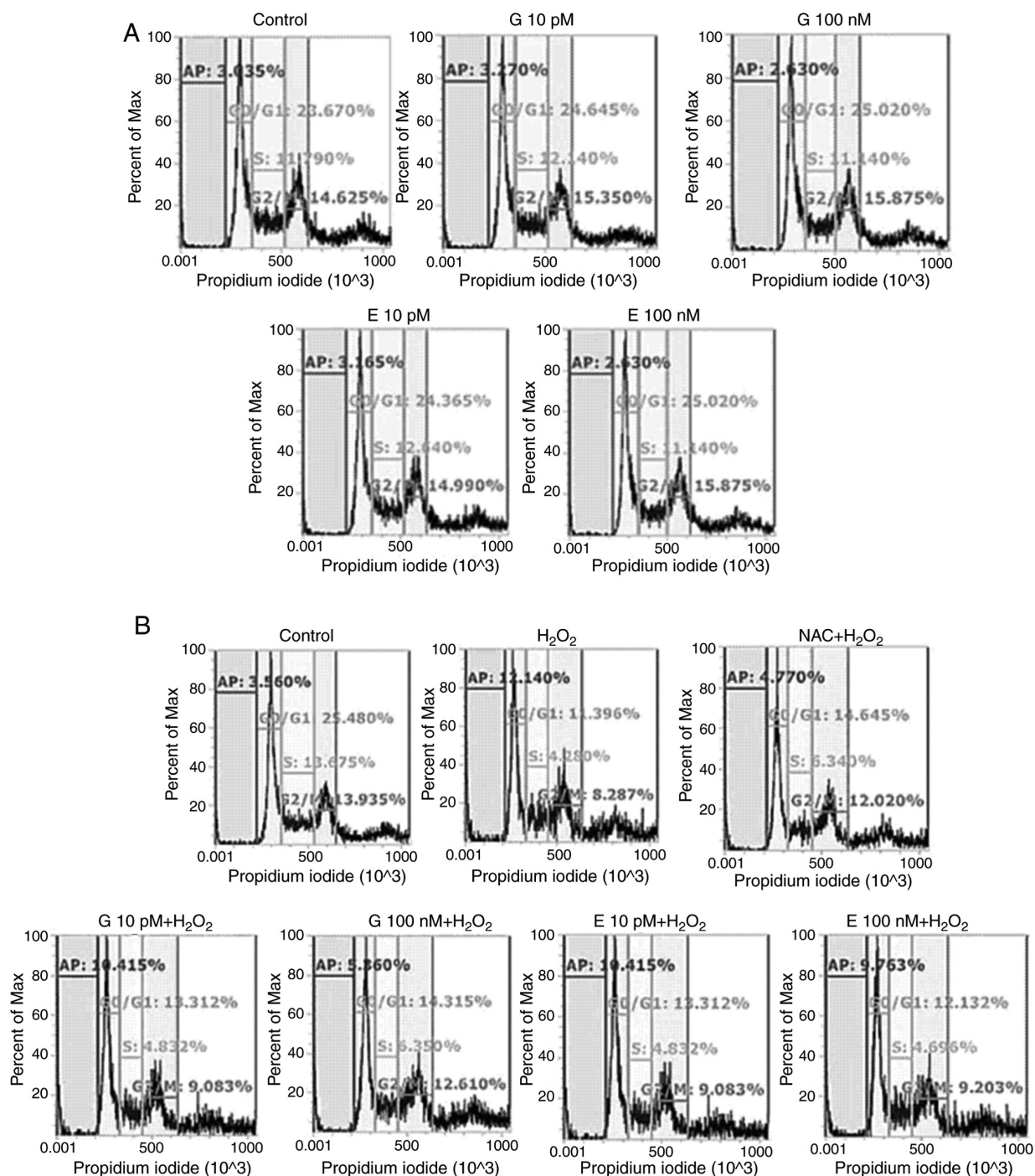


Figure S3. Effects of genistein (A and B) and 17 $\beta$ -estradiol (C and D) on mitochondrial membrane potential of H9C2 cultured in physiological (A and C) and peroxidative (B and D) conditions, in the presence/absence of various inhibitors. Abbreviations are as in previous figures. Reported data are means  $\pm$  SD of five independent experiments. \* $P$ <0.05 vs. C; # $P$ <0.05 vs. H<sub>2</sub>O<sub>2</sub> 200  $\mu$ M; § $P$ <0.05 vs. G; & $P$ <0.05 vs. E. Square brackets indicate significance between groups (§ $P$ <0.05).

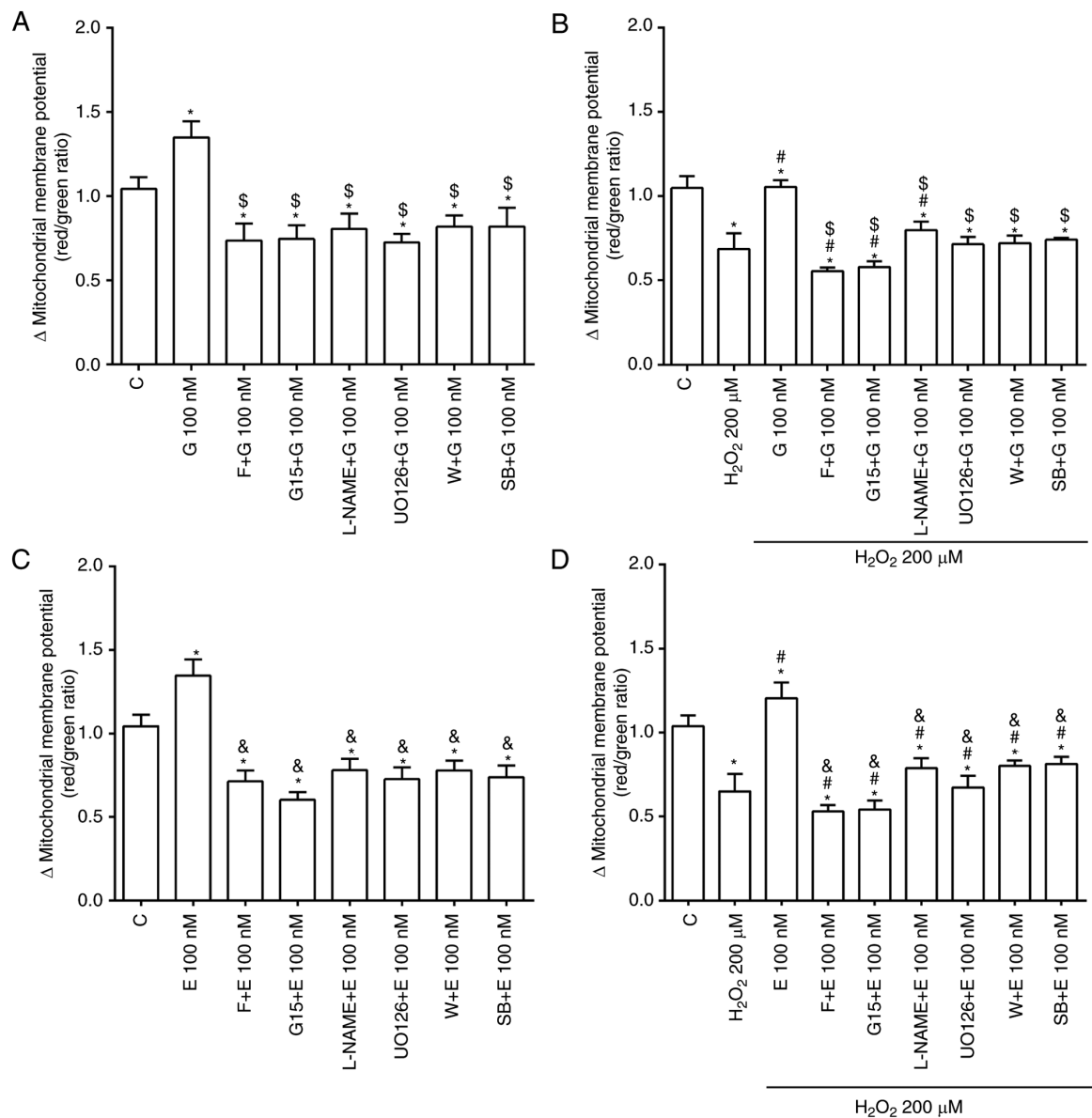




Figure S4. Effects of genistein and 17 $\beta$ -estradiol on phosphorylated and total eNOS/ $\beta$ -actin in physiological (A and C) and peroxidative (B and D) conditions in the presence/absence of various inhibitors. Abbreviations are as in previous figures. Reported data are means  $\pm$  SD of five independent experiments. \*P<0.05 vs. C; #P<0.05 vs. H<sub>2</sub>O<sub>2</sub> 200  $\mu$ M; \$P<0.05 vs. G; &P<0.05 vs. E. Square brackets indicate significance between groups (§P<0.05).

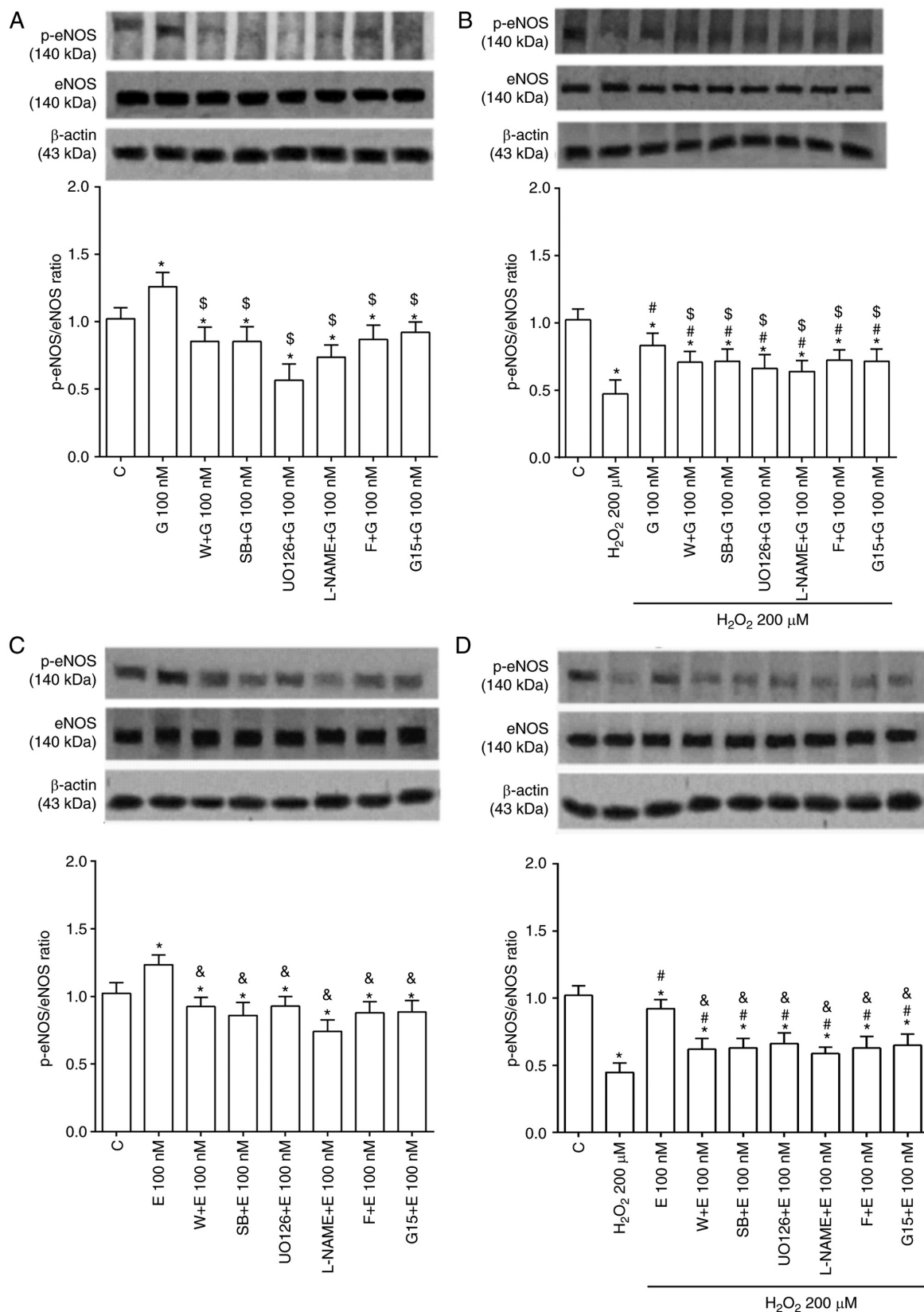


Figure S5. Effects of genistein and 17 $\beta$ -estradiol on phosphorylated and total Akt/ $\beta$ -actin in physiological (A and C) and peroxidative (B and D) conditions in the presence/absence of various inhibitors. Abbreviations are as in previous Figures. Reported data are means  $\pm$  SD of five independent experiments. \* $P$ <0.05 vs. C; # $P$ <0.05 vs. H<sub>2</sub>O<sub>2</sub> 200  $\mu$ M; \$ $P$ <0.05 vs. G; & $P$ <0.05 vs. E. Square brackets indicate significance between groups (§ $P$ <0.05).

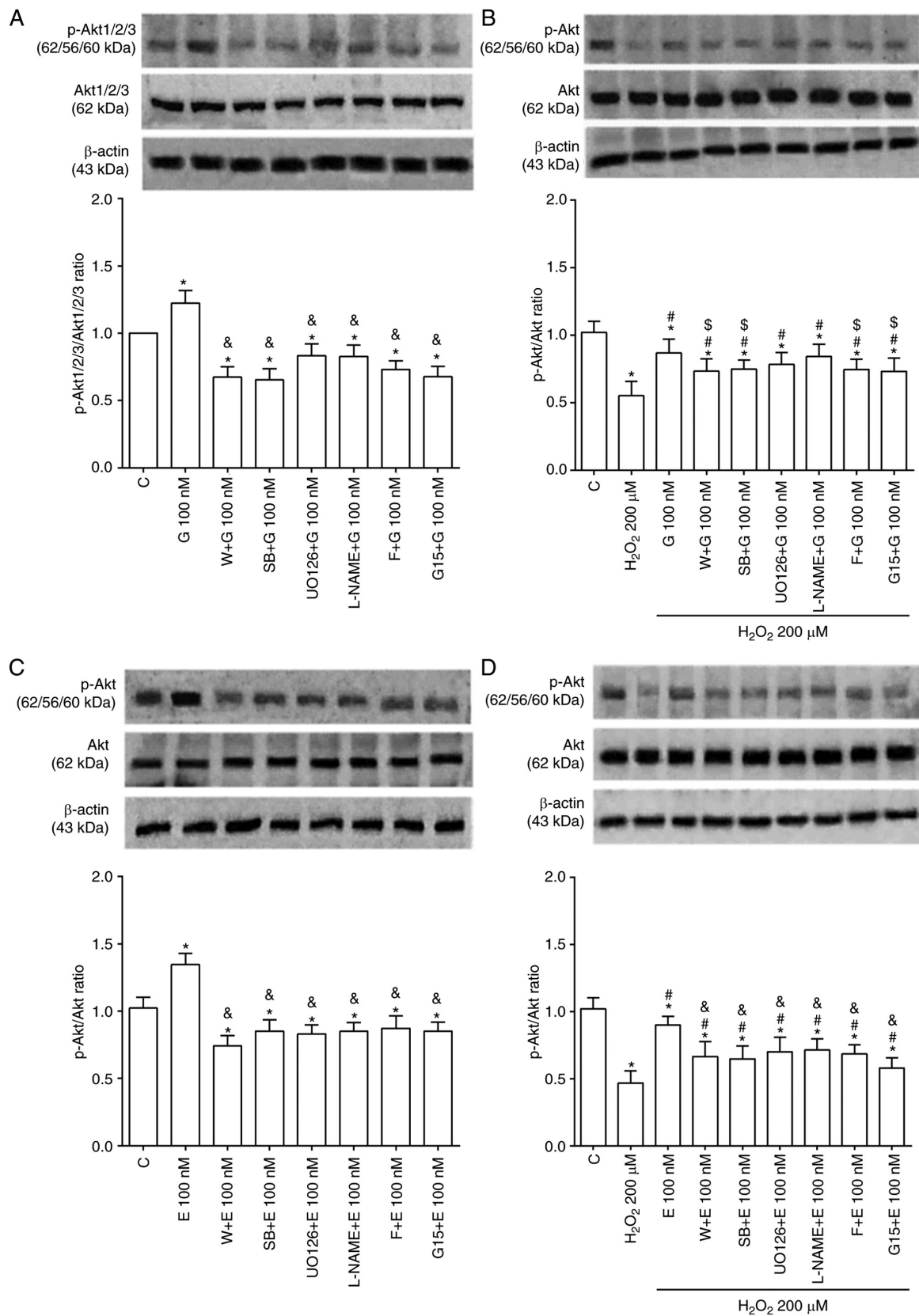


Figure S6. Effects of genistein and 17 $\beta$ -estradiol on phosphorylated and total ERK1/2/ $\beta$ -actin in physiological (A and C) and peroxidative (B and D) conditions in the presence/absence of various inhibitors. Abbreviations are as in previous figures. Reported data are means  $\pm$  SD of five independent experiments. \* $P$ <0.05 vs. C; # $P$ <0.05 vs. H<sub>2</sub>O<sub>2</sub> 200  $\mu$ M; \$ $P$ <0.05 vs. G; & $P$ <0.05 vs. E. Square brackets indicate significance between groups (\$ $P$ <0.05).

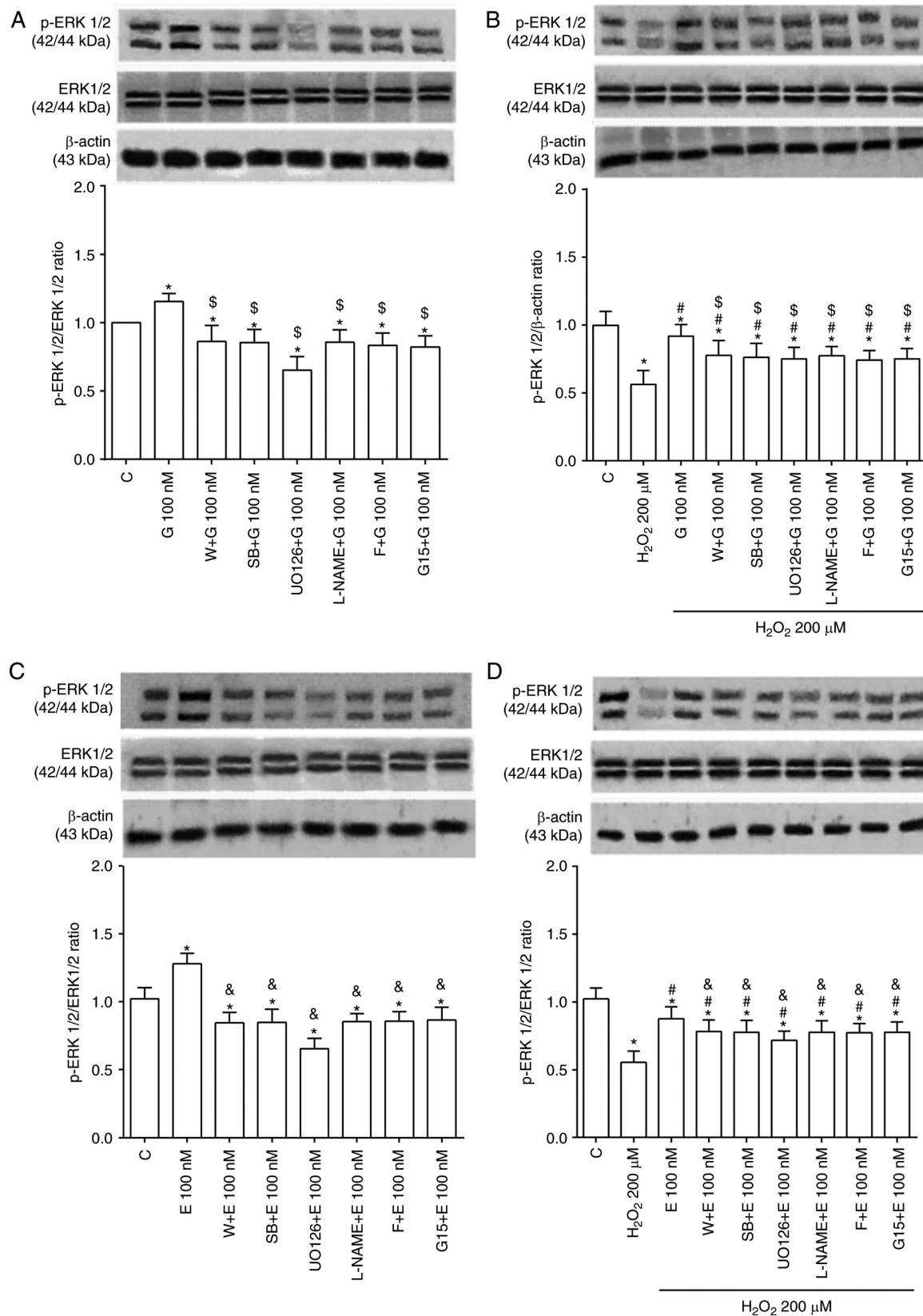


Figure S7. Effects of genistein and 17 $\beta$ -estradiol on phosphorylated and total p38 MAPK/ $\beta$ -actin in physiological (A and C) and peroxidative (B and D) conditions in the presence/absence of various inhibitors. Abbreviations are as in previous figures. Reported data are means  $\pm$  SD of five independent experiments. \* $P$ <0.05 vs. C; # $P$ <0.05 vs. H<sub>2</sub>O<sub>2</sub> 200  $\mu$ M; \$ $P$ <0.05 vs. G; & $P$ <0.05 vs. E. Square brackets indicate significance between groups (\$ $P$ <0.05).

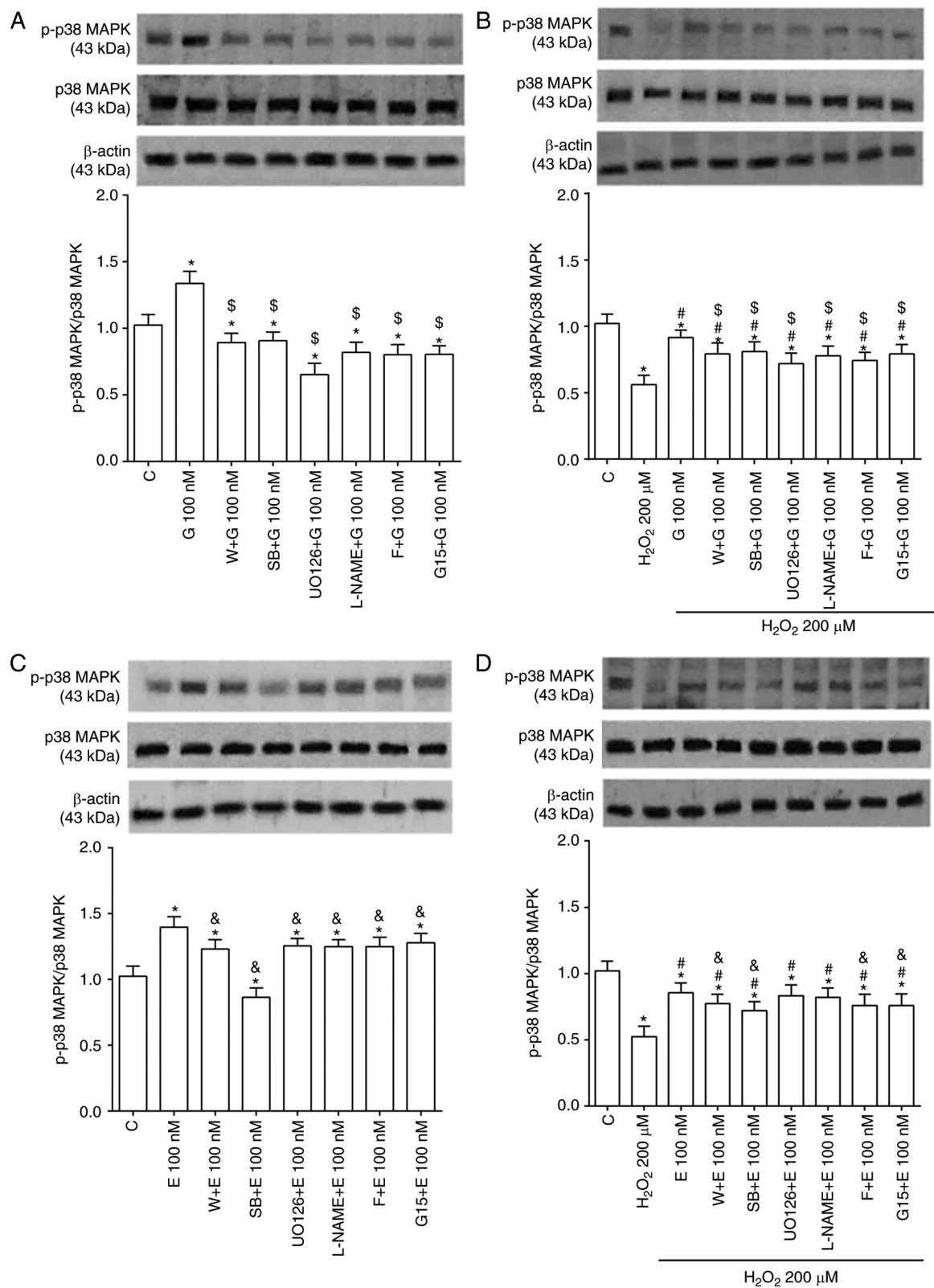


Figure S8. Effects of genistein and 17 $\beta$ -estradiol on iNOS expression in physiological (A and C) and peroxidative (B and D) conditions in the presence/absence of various inhibitors. Abbreviations are as in previous figures. Reported data are means  $\pm$  SD of five independent experiments. \* $P$ <0.05 vs. C; # $P$ <0.05 vs. H<sub>2</sub>O<sub>2</sub> 200  $\mu$ M; \$ $P$ <0.05 vs. G; & $P$ <0.05 vs. E. Square brackets indicate significance between groups (§ $P$ <0.05).

