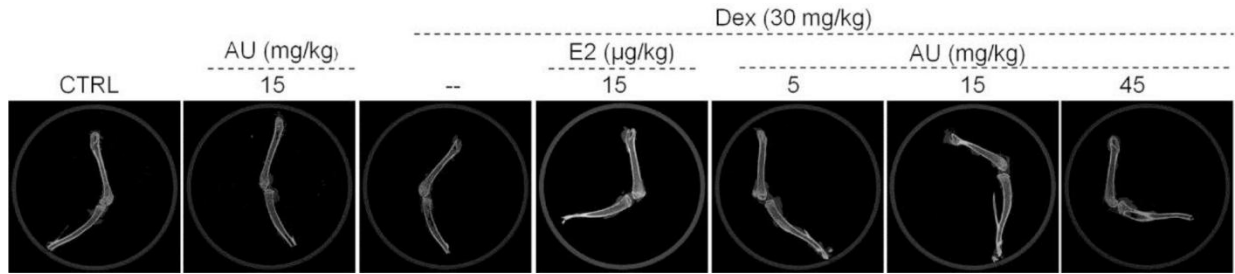
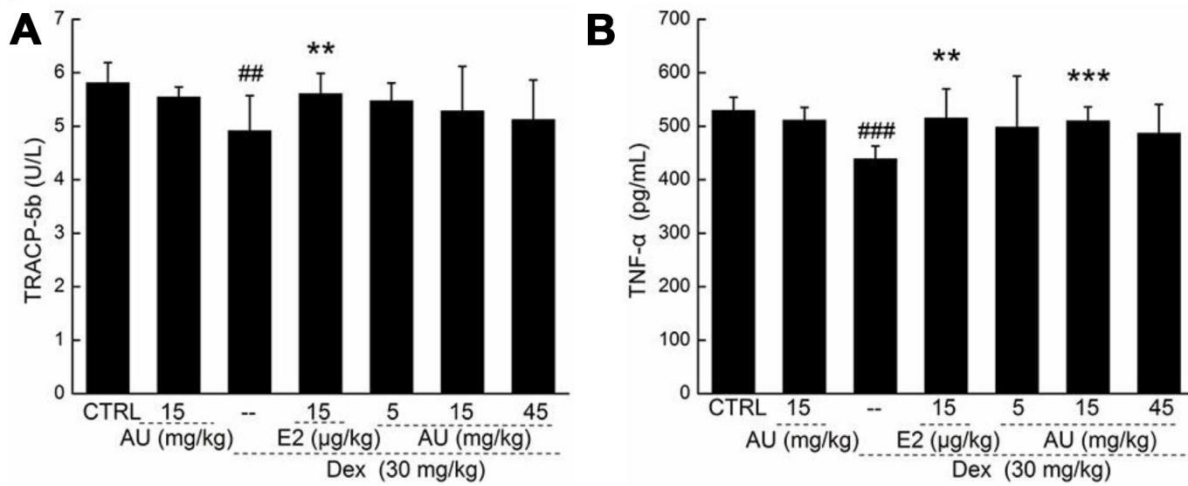


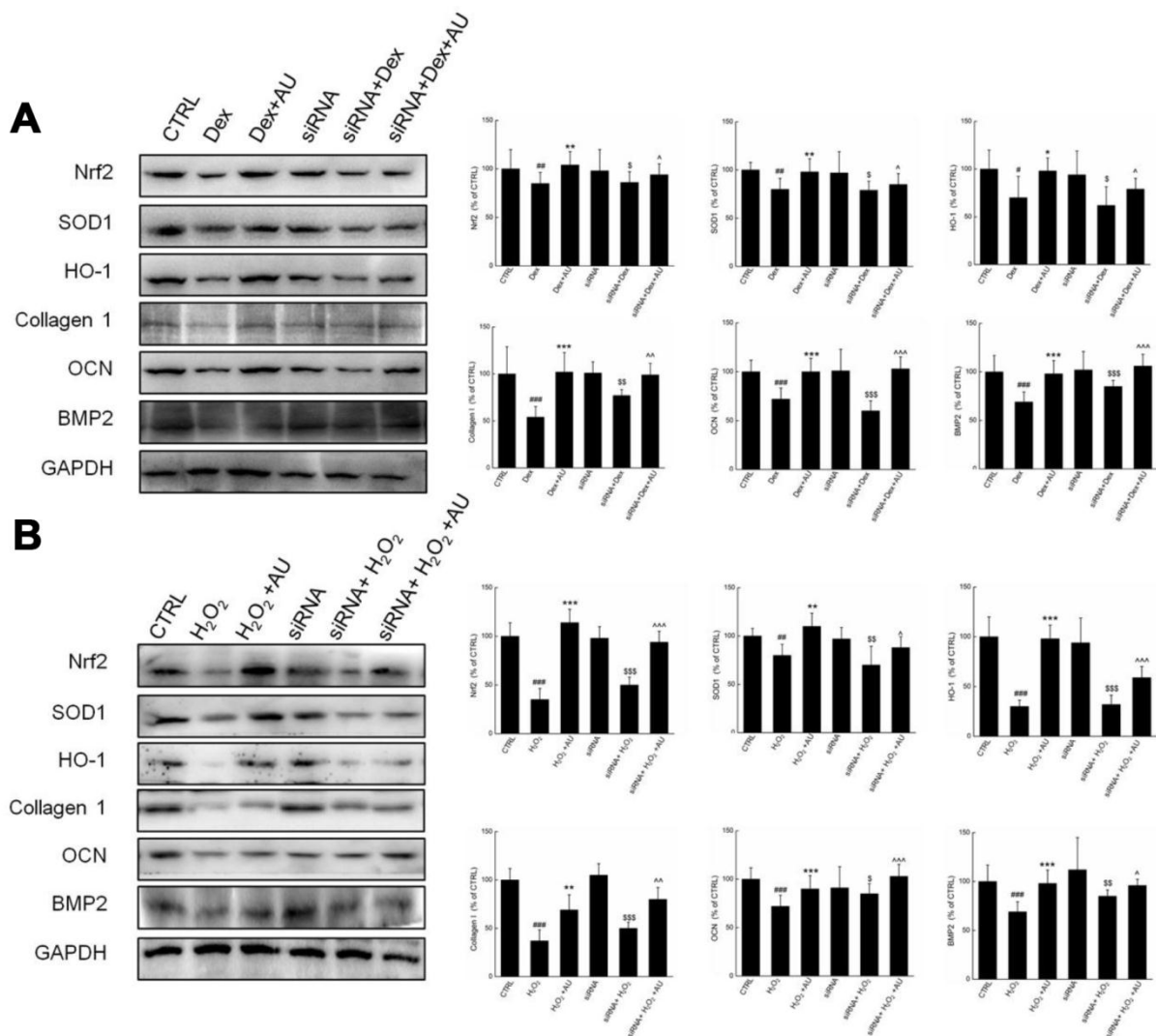
**SUPPLEMENTARY FIGURES**



**Supplementary Figure 1.** AU increased the thickness of the cortical cortex and increased the consecutiveness of the cortical cortex.



**Supplementary Figure 2.** The regulation effects of AU on the levels of (A) TRACP-5b and (B) TNF-α in serum of mice with osteoporosis. Data were expressed as mean ± S.E.D. (n=6) and analyzed using a one-way ANOVA. ##  $P < 0.01$  and ###  $P < 0.001$  vs. CTRL mice, \*  $P < 0.01$  and \*\*\*  $P < 0.001$  Dex-treated mice.



**Supplementary Figure 3.** Negative siRNA transfection failed to influence the effects of AU on the protein expressions in (A) Dex and (B) H<sub>2</sub>O<sub>2</sub> damaged MG63 cells. The quantification data of proteins were normalized by corresponding GAPDH, respectively, expressed as mean ± S.D. (n=4) and analyzed using a one-way ANOVA. #  $P < 0.05$ , ##  $P < 0.01$  and ###  $P < 0.001$  vs. control cells, \*  $P < 0.05$ , \*\*  $P < 0.01$  and \*\*\*  $P < 0.001$  vs. Dex or H<sub>2</sub>O<sub>2</sub>-exposed cells, \$  $P < 0.05$ , \$\$  $P < 0.01$  and \$\$\$  $P < 0.001$  vs. negative siRNA transfected control cells, ^  $P < 0.05$  and ^^  $P < 0.001$  vs. Dex or H<sub>2</sub>O<sub>2</sub>-exposed negative siRNA transfected cells.