

Supplementary Figure Captions

Figure S1. CuONPs triggered DNA damage in HUVECs.

(A-D) The intensities of the bands on the western blotting in Figure 2E were analyzed using an ImageJ software. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$ versus untreated HUVECs.

Figure S2. CuONPs treatment caused oxidative stress in HUVECs.

(A) and (B) The fluorescence intensities in Figure 3A and 3B were analyzed using CytExpert software, respectively. Unpaired Student's *t*-tests were performed for statistical analysis. $**p < 0.05$ versus untreated HUVECs. (C-D) The intensities of the bands on the western blotting in Figure 3C were analyzed using an ImageJ software. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$ versus untreated HUVECs.

Figure S3. Oxidative stress mediated DNA damage and cell death in CuONPs-treated HUVECs.

(A) The fluorescence intensities in Figure 4B were analyzed using CytExpert software. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$. (B-E) The intensities of the bands on the western blotting in Figure 4C were analyzed using an ImageJ software. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$.

Figure S4. p38 MAPK was involved in DNA damage and cell death in CuONPs-treated HUVECs.

The intensities of the bands on the western blotting in Figure 5A-5C were analyzed

using an ImageJ software, respectively. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$.

Figure S5. Copper ions chelator TTM alleviated HUVECs DNA damage and cell death induced by CuONPs.

(A) and (B) The fluorescence intensities in Figure 6A and 6B were analyzed using CytExpert software, respectively. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$. (C) and (D) The intensities of the bands on the western blotting in Figure 6D and 6F were analyzed using an ImageJ software, respectively. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$. (E) The fluorescence intensities in Figure 6H were analyzed using CytExpert software, respectively. One-way ANOVA followed by Tukey's test was performed for statistical analysis. $**p < 0.05$.

Figure S1.

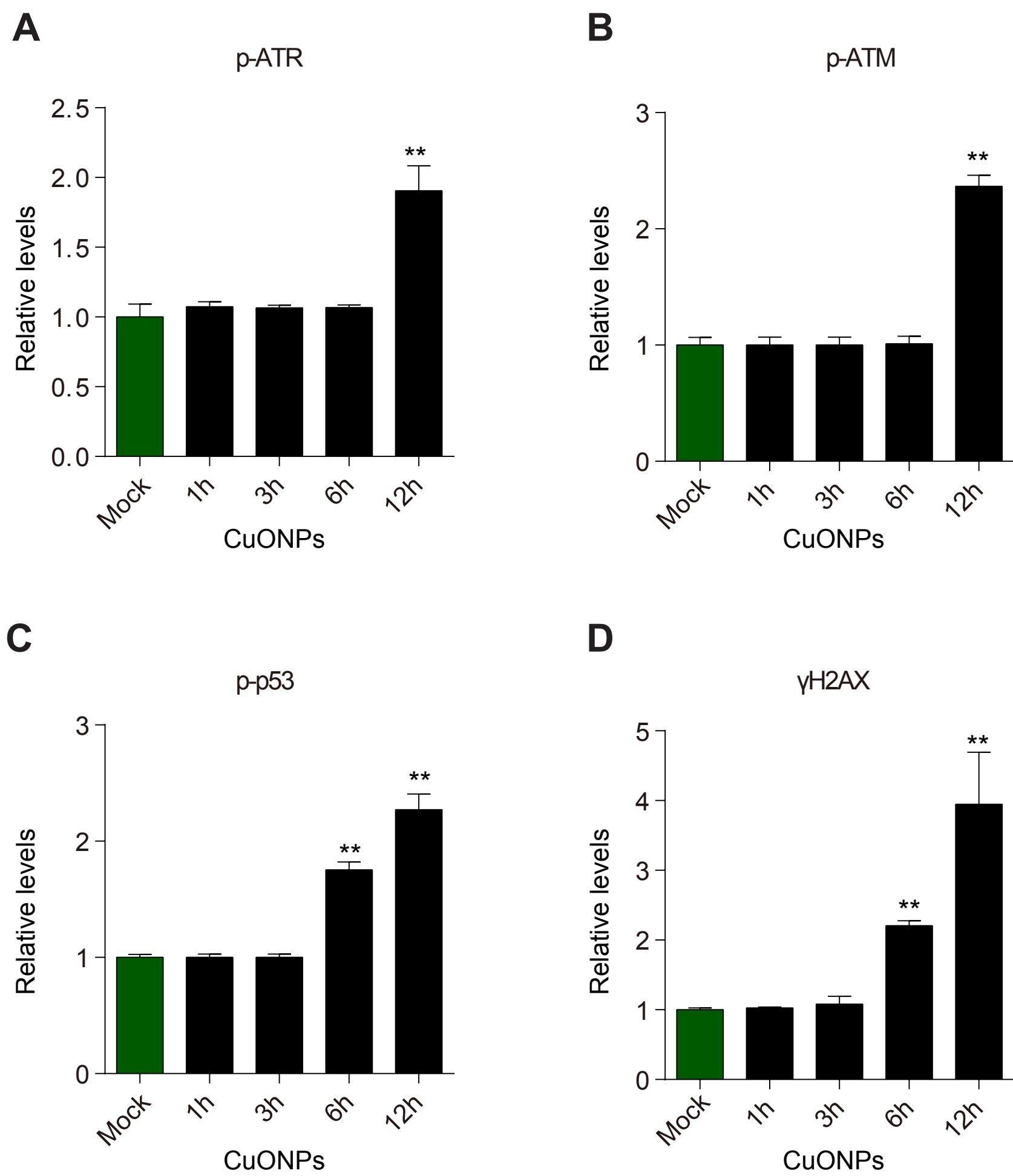
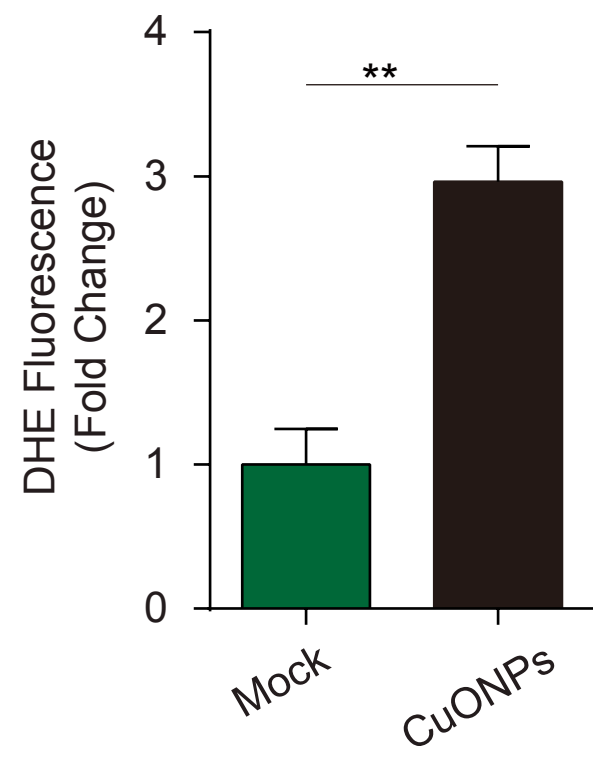
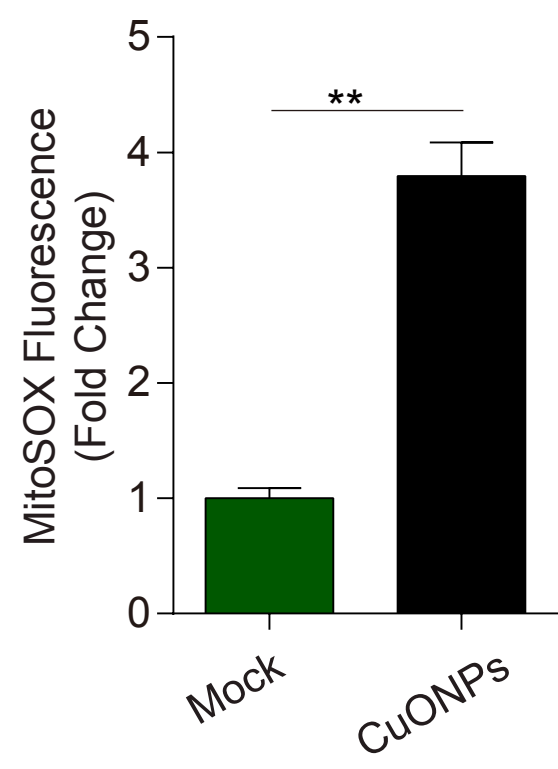


Figure S2

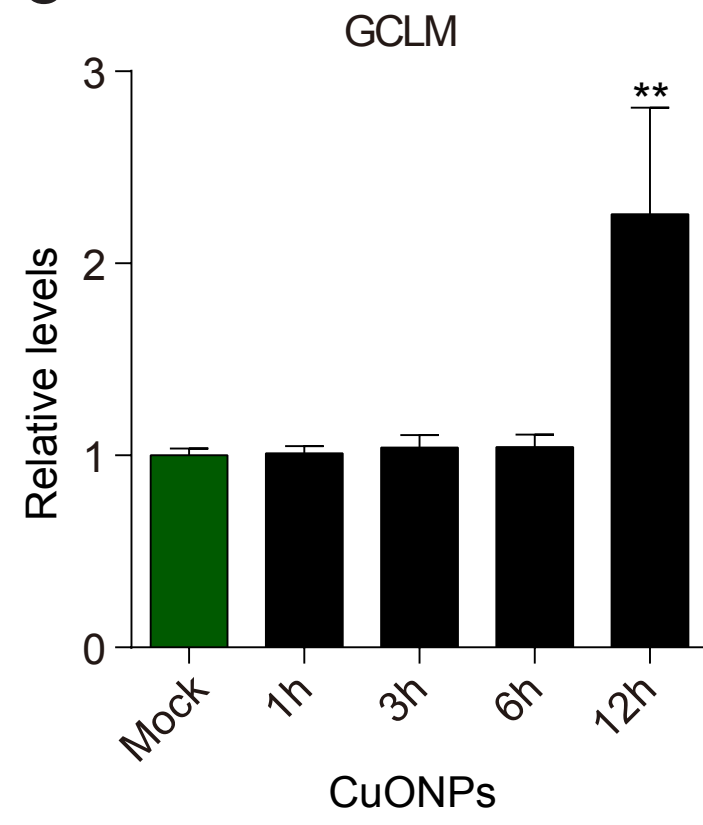
A



B



C



D

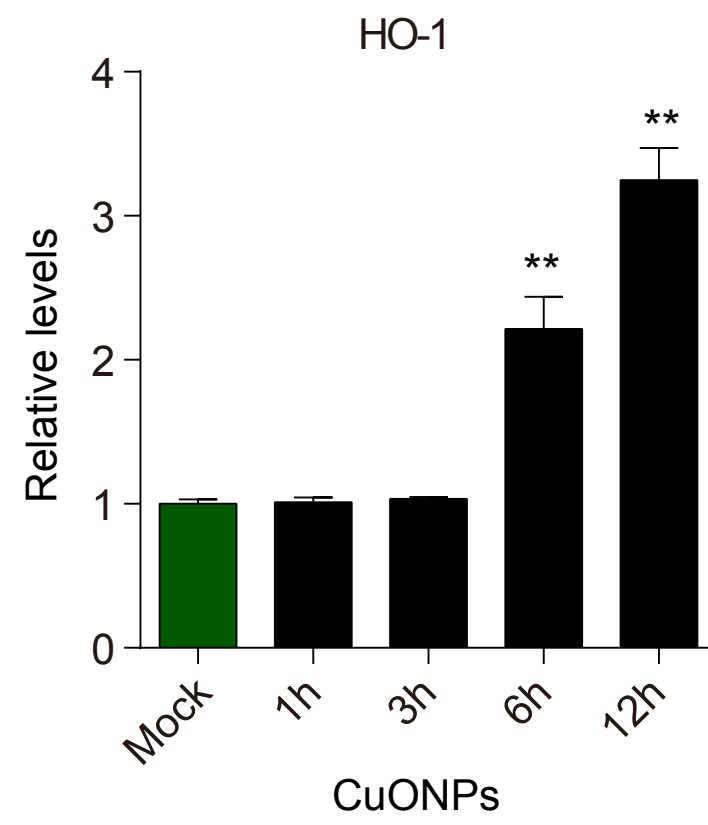


Figure S3

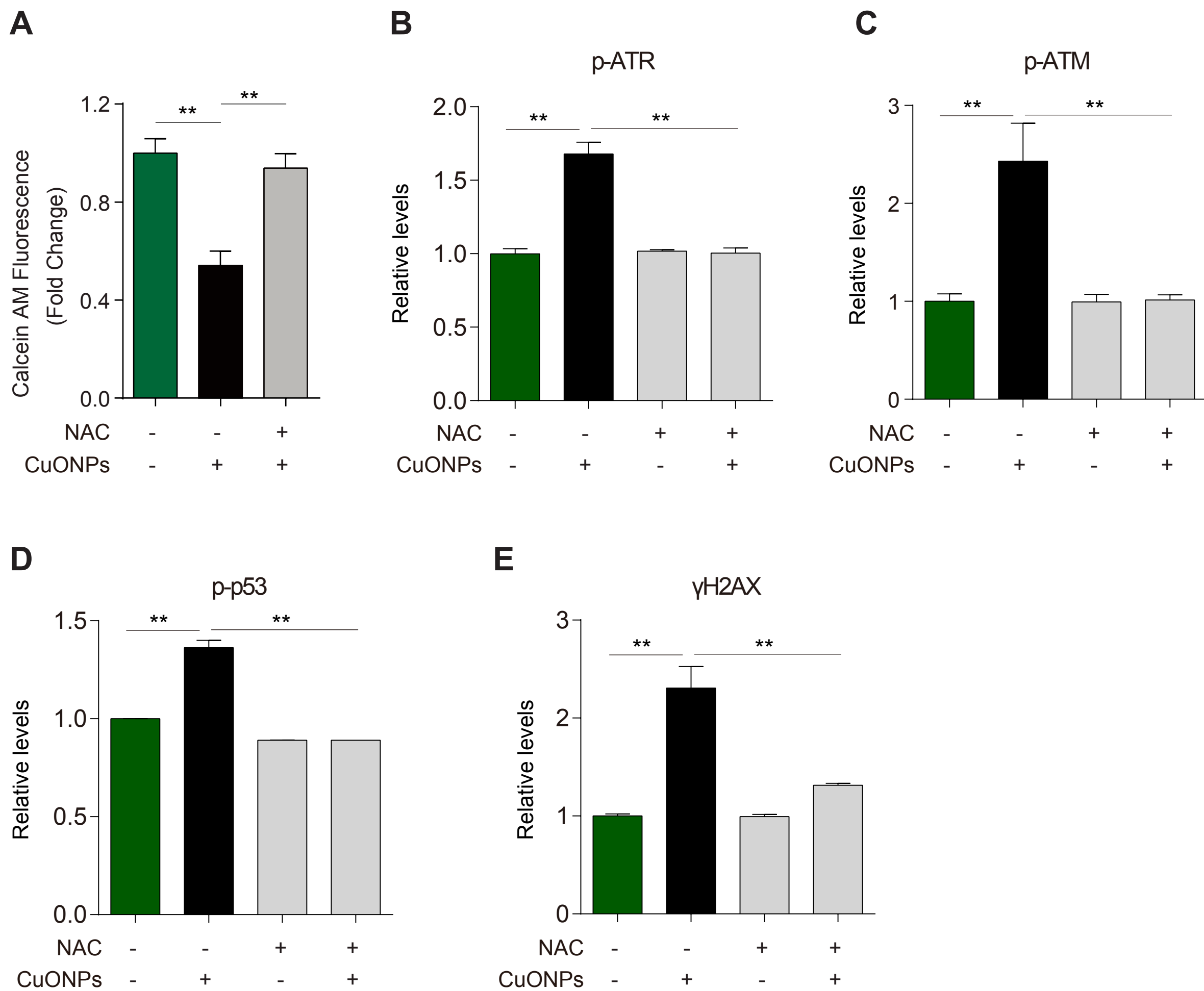
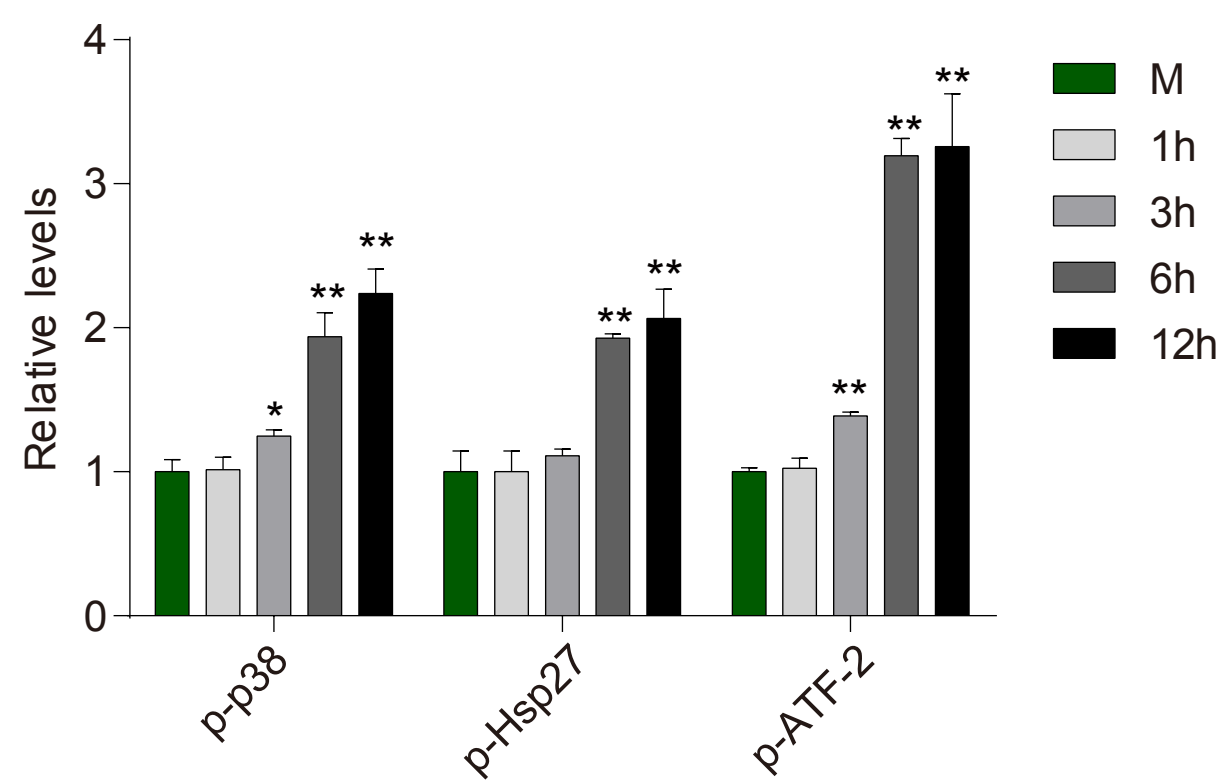
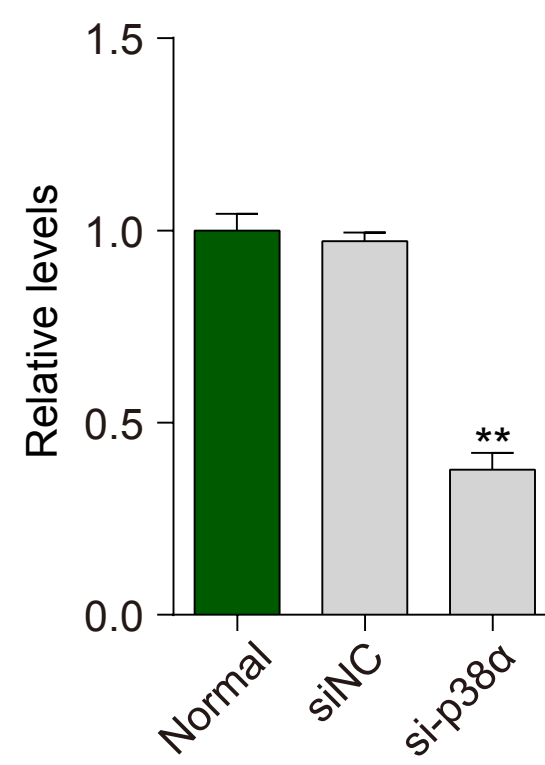


Figure S4

A



B



C

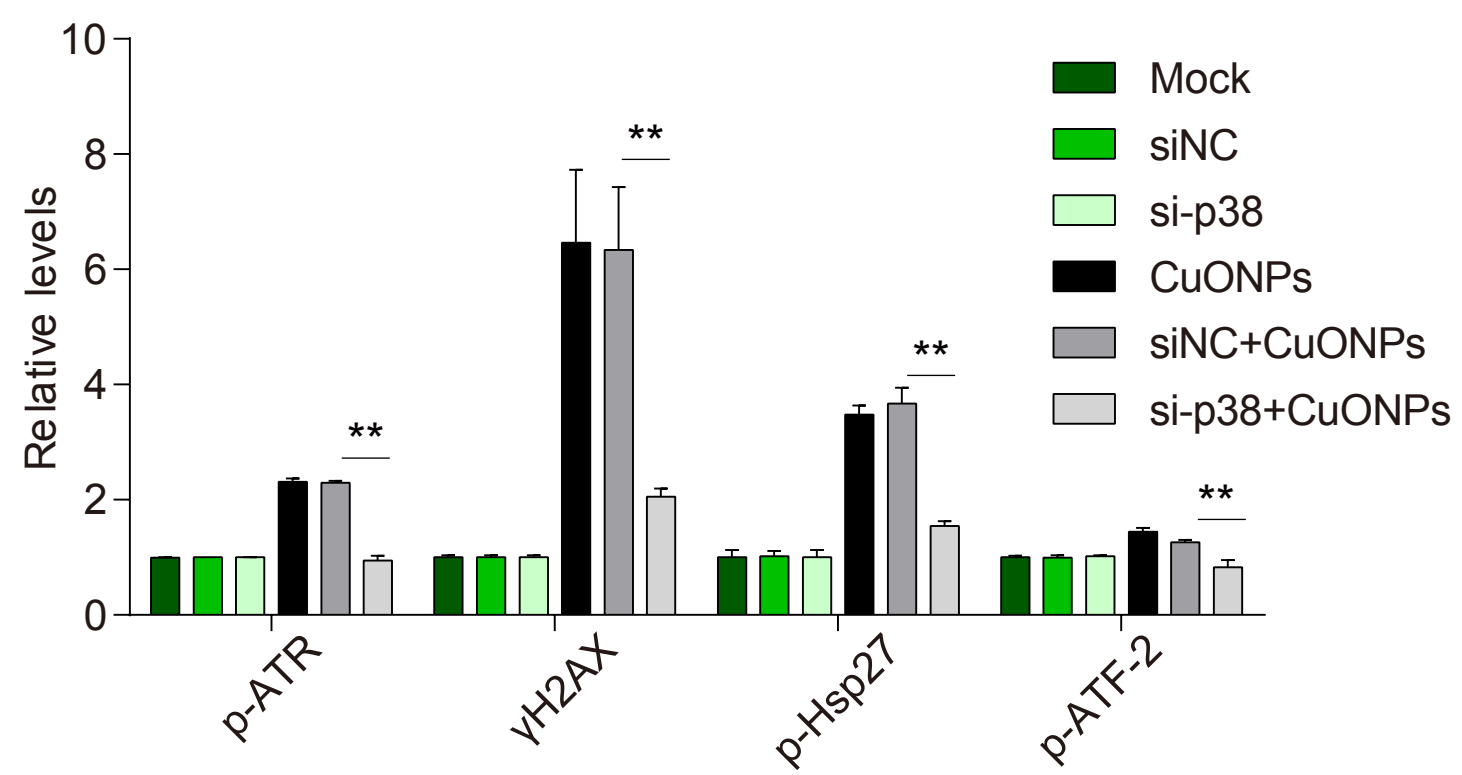


Figure S5

