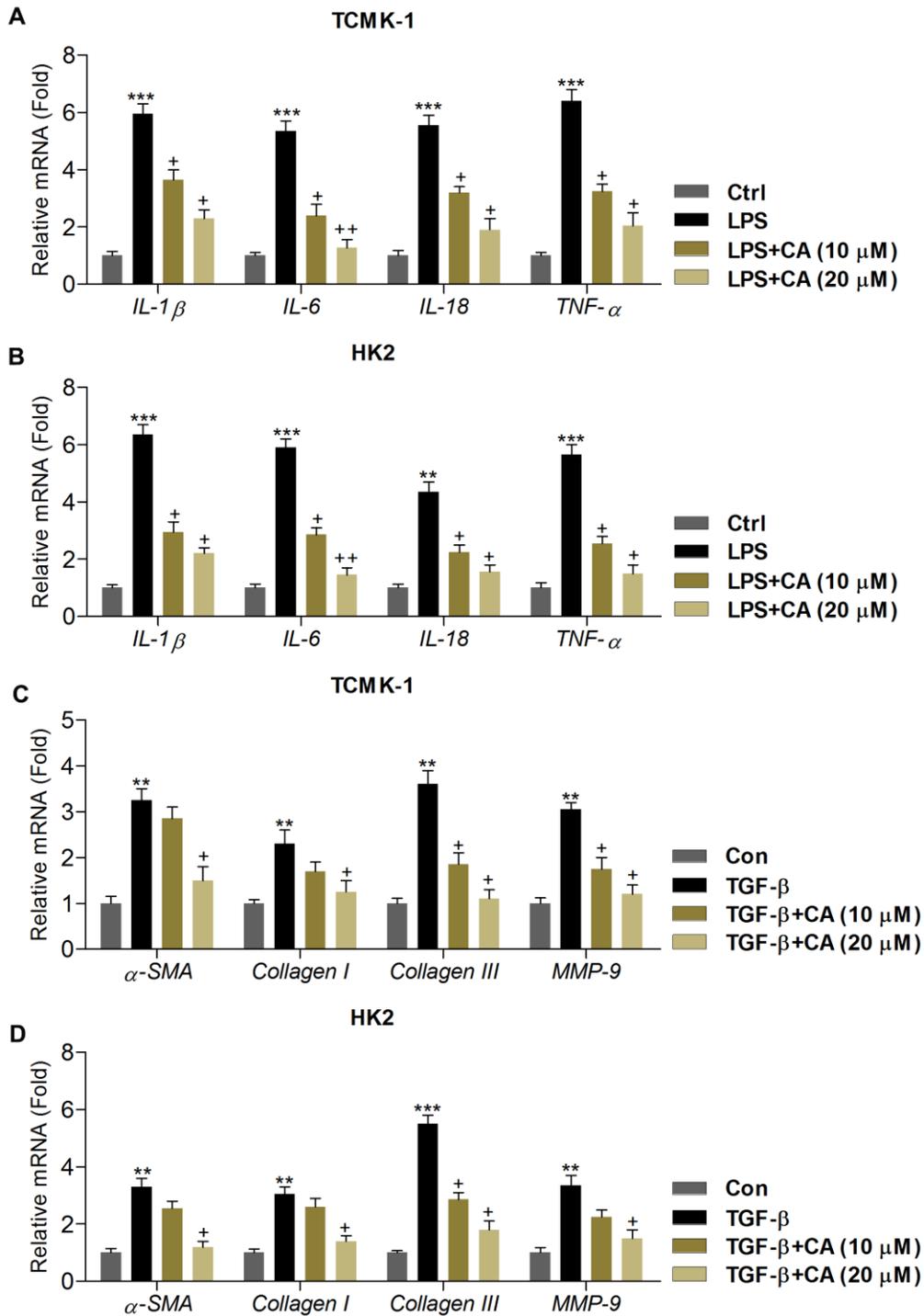
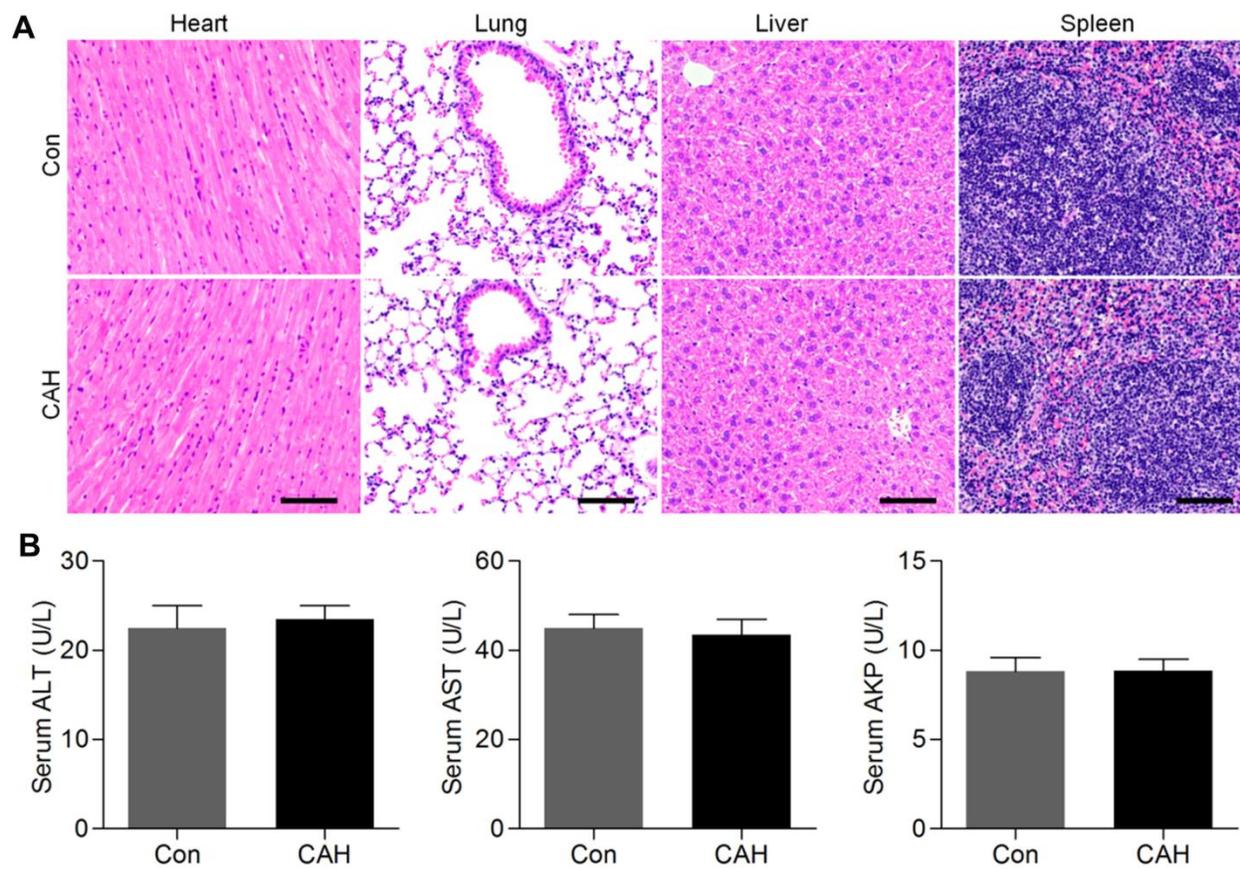


SUPPLEMENTARY FIGURES



**Supplementary Figure 1. Carminic acid exhibits anti-inflammatory and anti-fibrotic effects *in vitro*.** (A) TCMK-1 and (B) HK2 cells were treated with 100 ng/ml of LPS for 24 h in the absence or presence of CA (10 and 20 μM), and were then collected for RT-qPCR analysis of IL-1β, IL-6, IL-18 and TNF-α. (C) TCMK-1 and (D) HK2 cells were exposed to 10 ng/ml of TGF-β for 24 h with or without CA (10 and 20 μM). Then, all cells were harvested for RT-qPCR analysis of fibrotic genes including α-SMA, Collagen I, Collage III and MMP-9 in cells as treated. The results are expressed as the means ± SEM. n = 4 in each group. \*\**P* < 0.01 and \*\*\**P* < 0.001 compared with the Ctrl group; +*P* < 0.05 and ++*P* < 0.01 compared with the LPS or TGF-β group.



**Supplementary Figure 2. Toxicity analysis of carminic acid *in vivo*.** (A) H&E staining for heart, lung, liver and spleen in mice treated with or without carminic acid. (B) Assessments of serum ALT, AST and AKP in mice from the indicated groups. The results are expressed as the means  $\pm$  SEM. n = 6 in each group.