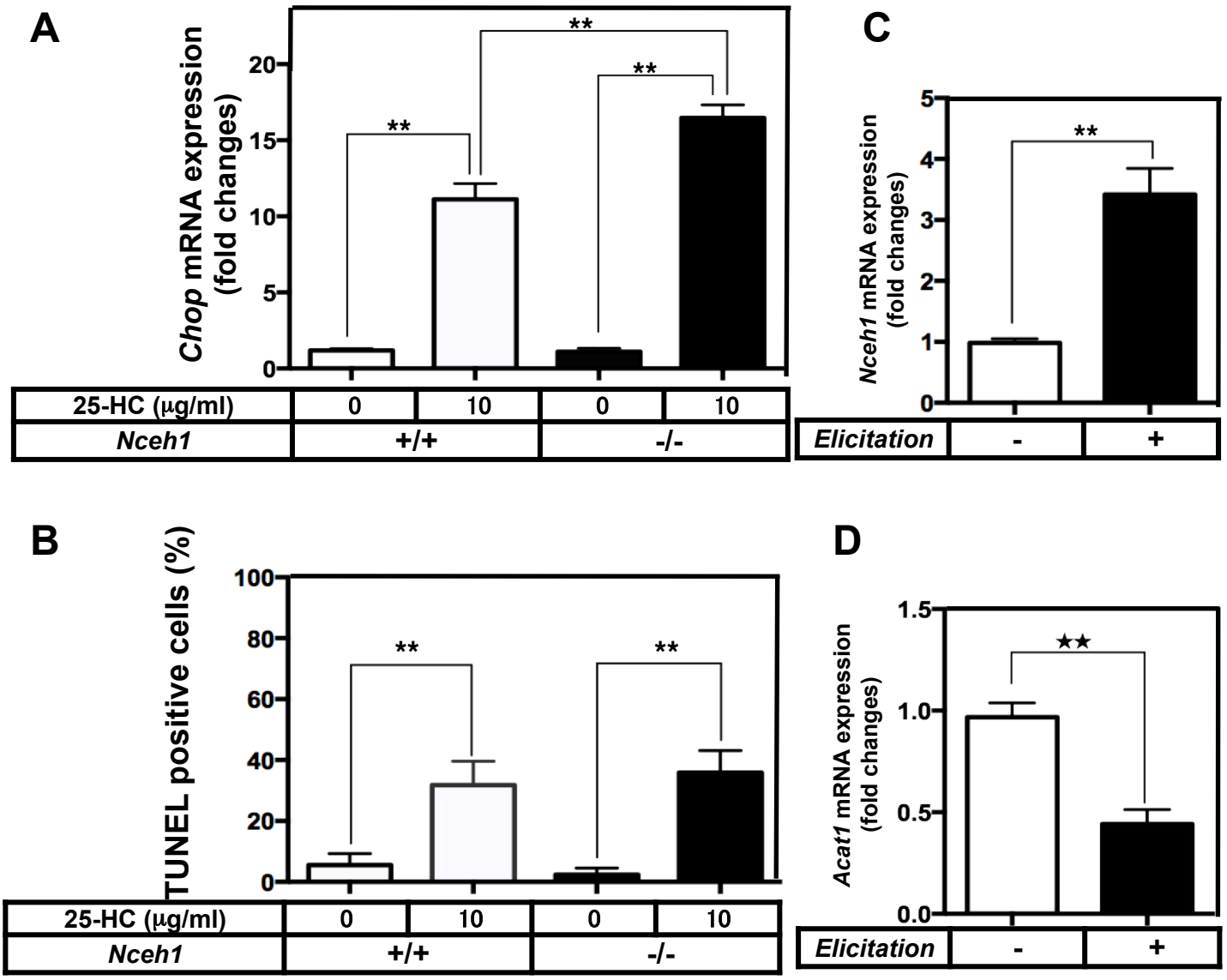
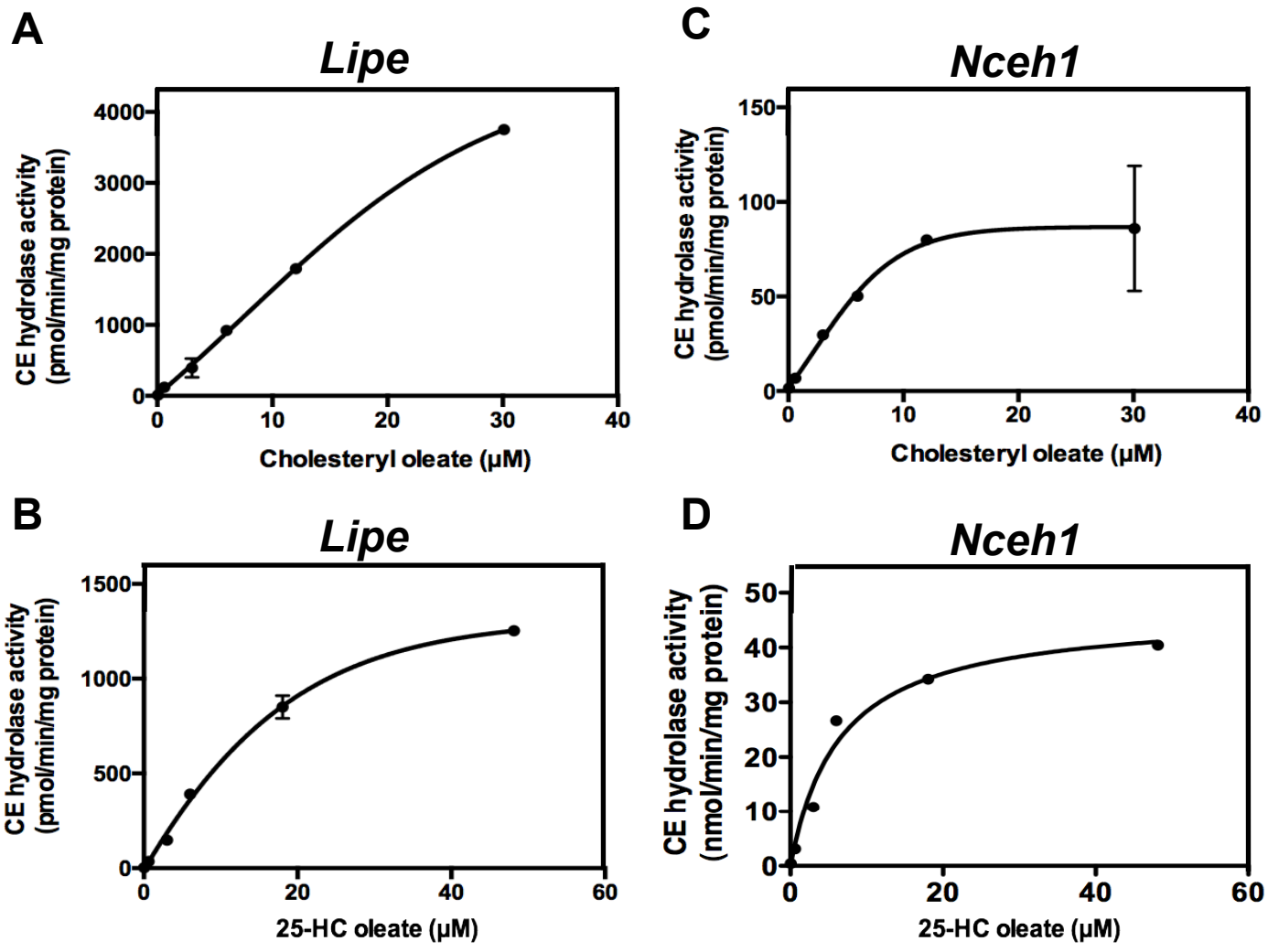
Supplementary Figure I



<u>Supple. Fig. 1.</u> Non-elicited macrophages are susceptible to 25-HC-induced apoptosis and ER stress.

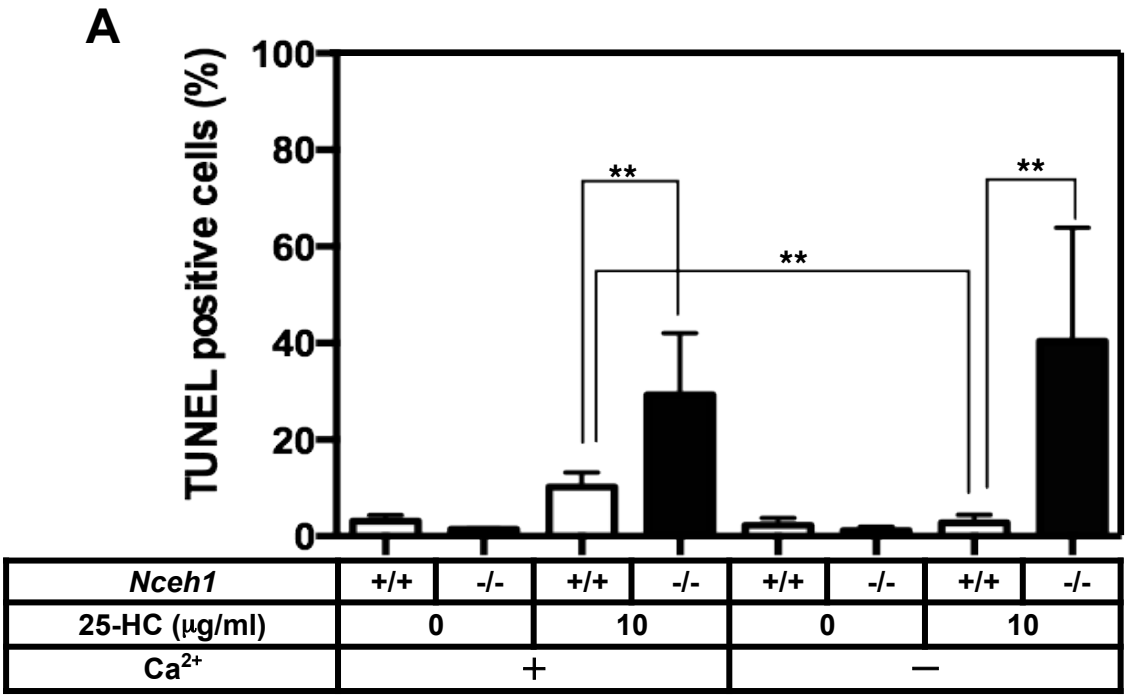
Non-elicited and elicited macrophages were prepared from WT and *Nceh1*$^{-/-}$ mice. Five wells of the cells were incubated in DMEM containing 10% LPDS with vehicle or 25-HC (10 μg/ml) for 12 h. **A**, The apoptotic cells were detected by TUNEL staining. **B**, Expression of *Chop* was measured by RT-PCR. Four wells of non-elicited and elicited Macrophage were incubated in DMEM containing 10% LPDS for 12h. Expression of *Nceh1* (C) and *Acat1* (D) was measured by RT-PCR. Data are expressed as the mean ± SEM. ** denote $p < 0.01$. Respectively, as determined by ANOVA followed by the Tukey-Kramer posthoc test.

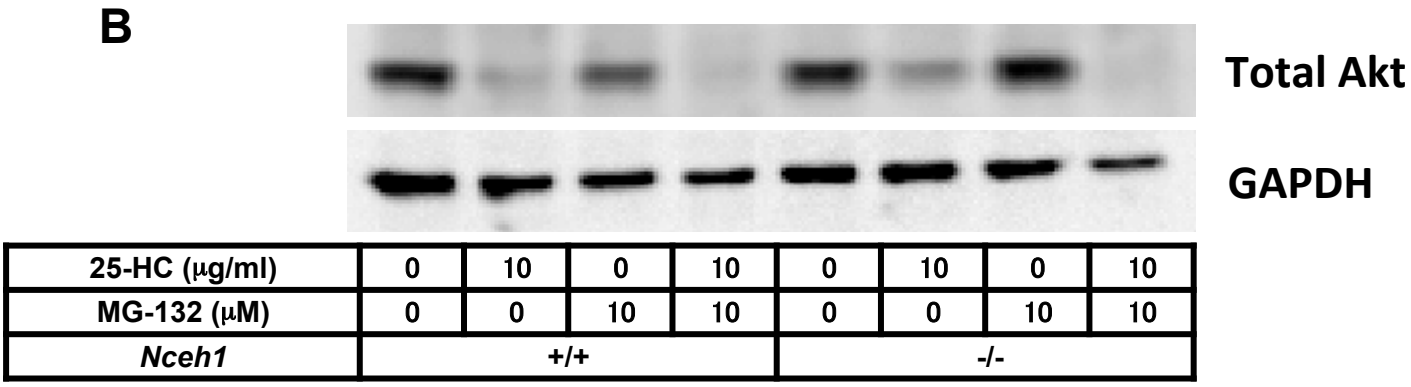
Supplementary Figure II



Supple. Fig. II. Hydrolase activities of Lipe (A, B) and Nceh1 (C, D) for cholesteryl [^{14}C]oleate (A, C) or 25-HC [^{14}C]oleate. (B, D).
Forty eight h after HEK293A cells were infected with Ad-LacZ, Ad-Lipe or Ad-Nceh1, the cells were sonicated and whole cell lysate were subjected to the measurements of hydrolase activity. Data are expressed as the mean ± SEM.

Supplementary Figure III





<u>Supple Fig. III.</u> Influx of Ca^{2+} (A) and facilitation of Akt degradation (B) is not responsible for the Nceh1-dependent augmentation of 25-HC-induced apoptosis.

A) Five wells of TGEMs were incubated in DMEM or Ca^{2+} free medium containing 10% LPDS with vehicle or 25-HC (10 μg/ml) for 12 h. The apoptotic cells were detected by TUNEL. Data are expressed as the mean ± SEM. ** denote $p < 0.01$ and determined by ANOVA followed by the Tukey-Kramer posthoc test. **B**) TGEMs were incubated in DMEM containing 10% LPDS with vehicle or 25-HC (10 μg/ml) in the presence or absence of MG-132, a proteasome inhibitor, (10 μM) for 12 h. The cells were homogenized and whole cell lysates were subjected to western blot analysis using anti-Akt antibody. Ten micrograms of proteins of whole cell lysates were separated by SDS-PAGE on the NuPAGE 10% Bis-Tris gel.