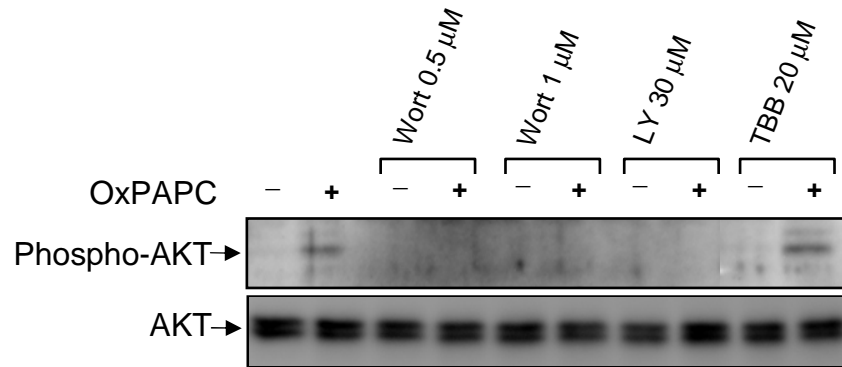
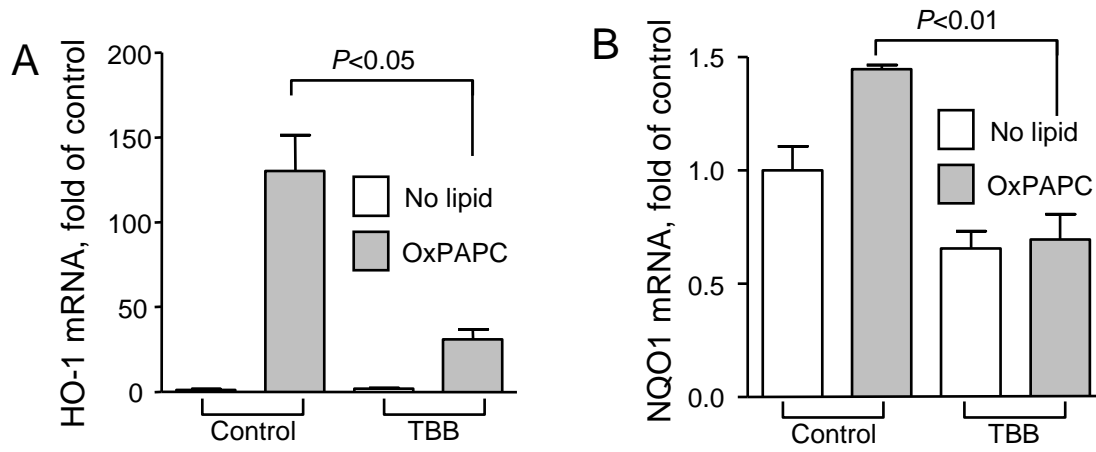


Supplementary Figure 1



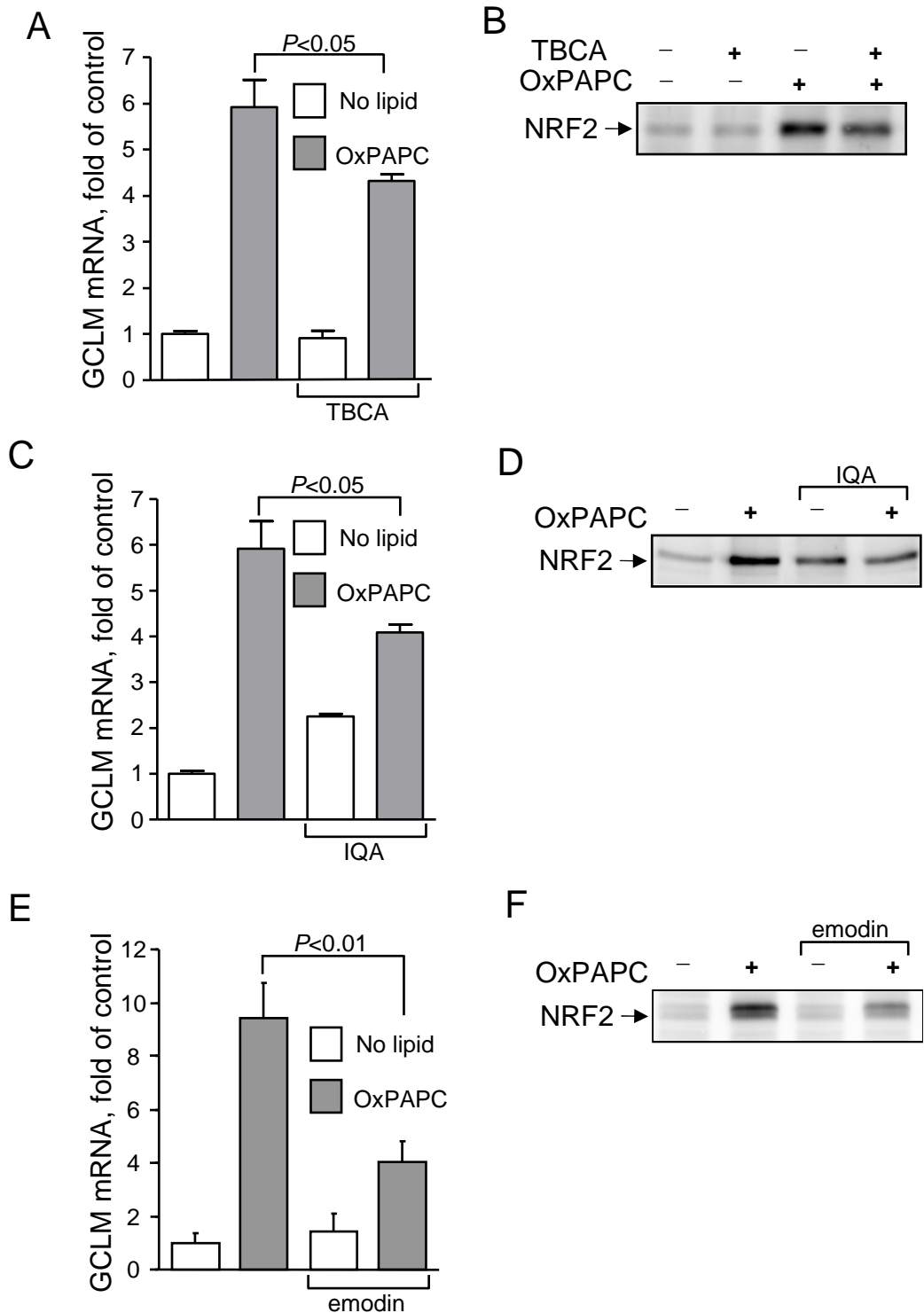
Supplementary Figure 1. Effect of PI3K and CK2 inhibitors on OxPAPC-induced AKT phosphorylation. HUVECs were pretreated with wortmannin (0.5 and 1 μM), LY294002 (30 μM) or TBB (20 μM) for 30 minutes, thereafter cells were stimulated with OxPAPC (130 μM , 15 minutes). Western blot of cell lysates were probed with antibodies against phosphorylated and total AKT.

Supplementary Figure 2



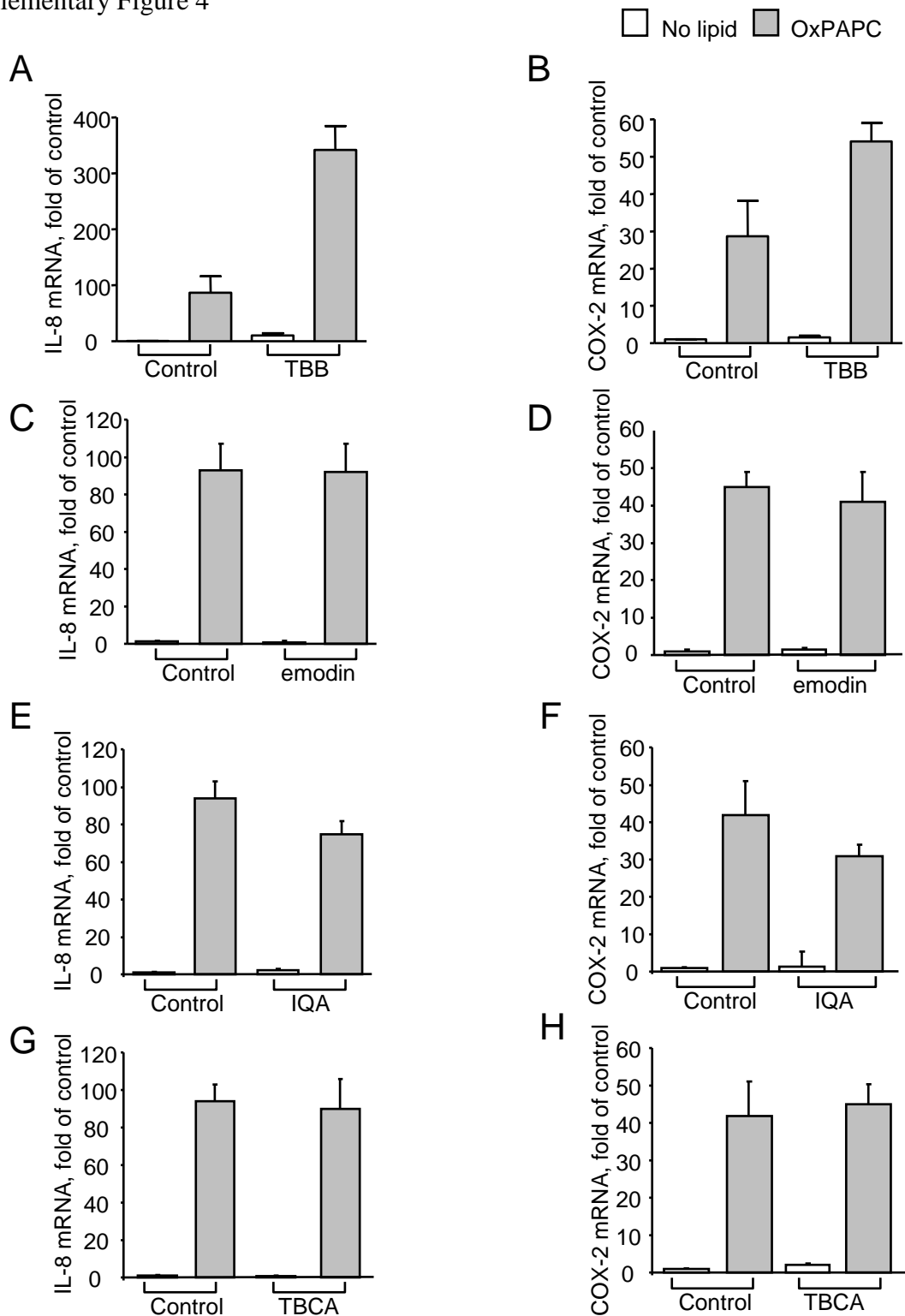
Supplementary Figure 2. TBB inhibits induction of NRF2-dependent genes HO-1 and NQO1 by OxPAPC. Before stimulation with OxPAPC (130 $\mu\text{mol/L}$) HUVECs were pretreated either with vehicle or TBB (20 $\mu\text{mol/L}$) for 30 minutes. After 6 hours stimulation was stopped by addition of Trizol reagent. Levels of HO-1 and NQO1 mRNAs (A and B, respectively) were quantified by RT-qPCR and normalized to $\beta 2$ -microglobulin mRNA levels.

Supplementary Figure 3



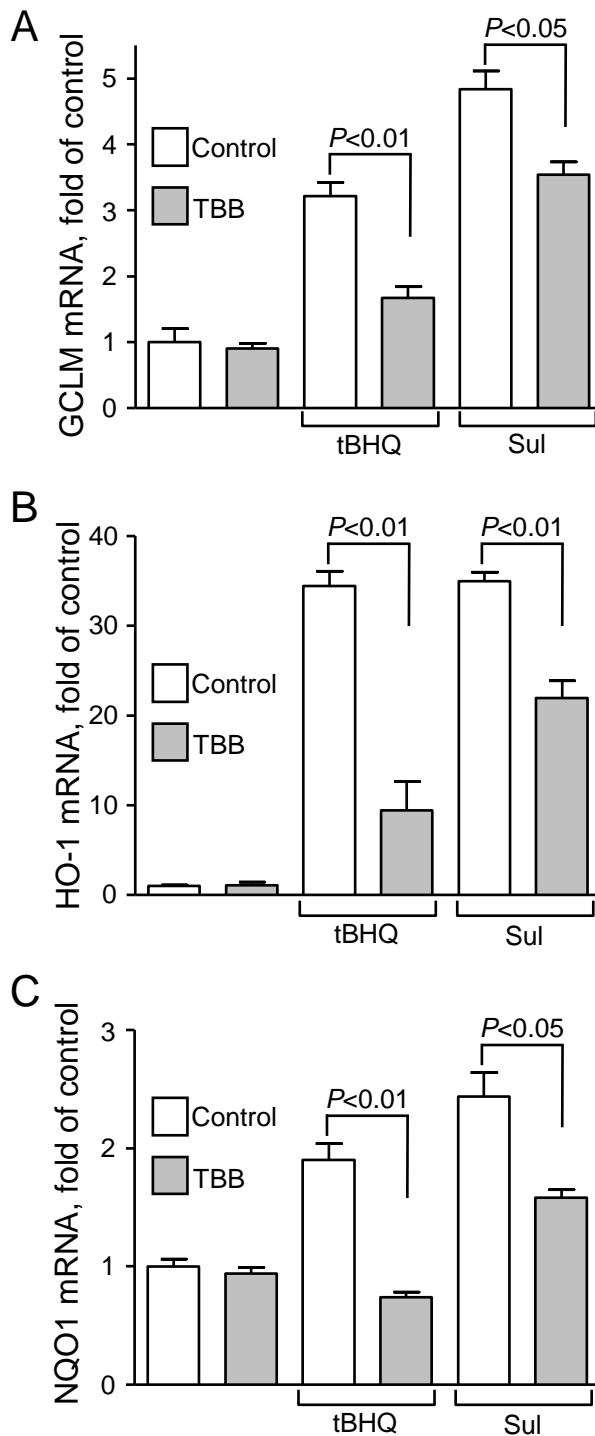
Supplementary Figure 3. Effects of CK2 inhibitors TBCA, IQA and emodin on upregulation of GCLM mRNA and NRF2 protein levels by OxPAPC. HUVECs were pretreated for 30 minutes with TBCA (20 $\mu\text{mol/L}$) (A and B), IQA (20 $\mu\text{mol/L}$) (C and D) or with emodin (10 $\mu\text{mol/L}$) (E and F) before stimulation with OxPAPC (130 $\mu\text{mol/L}$). A, C and E, levels of GCLM mRNA were quantified by RT-qPCR and normalized to $\beta 2$ -microglobulin mRNA. B, D and F, Western blot analysis of NRF2 levels. OxPAPC stimulation was stopped after 2 hours. Cell lysates were probed with antibodies against NRF2.

Supplementary Figure 4



Supplementary Figure 4. Effect of CK2 inhibitors TBB, emodin, TBCA, and IQA on induction of IL-8 and COX-2 mRNA levels by OxPAPC. HUVECs were pretreated for 30 minutes with TBB (20 $\mu\text{mol/L}$) (A and B), emodin (10 $\mu\text{mol/L}$) (C and D), IQA (20 $\mu\text{mol/L}$) (E and F) or with TBCA (20 $\mu\text{mol/L}$) (G and H) before stimulation with OxPAPC (130 $\mu\text{mol/L}$). Levels of IL-8 (A,C,E and G) and COX-2 (B,D,F and H) mRNAs were quantified by RT-qPCR and normalized to $\beta 2$ -microglobulin mRNA.

Supplementary Figure 5



Supplementary Figure 5. Induction of electrophilic genes by tBHQ and sulforaphane is attenuated by CK2 inhibitor TBB. HUVECs were pretreated for 30 minutes with TBB (20 $\mu\text{mol/L}$) and thereafter sulforaphane (5 mmol/L) or tBHQ (50 $\mu\text{mol/L}$) were added. After 6 hours stimulation was stopped by Trizol reagent addition. GCLM (A), HO-1 (B) and NQO1 (C) mRNA levels were quantified by RT-qPCR and normalized to $\beta 2$ -microglobulin mRNA levels.