

Figure S1. oxLDL significantly increases the expression of ICAM-1 and VCAM-1 under HG conditions. ECs were cultured under low glucose (5 mM) or high Glu (25 mM) conditions for 48 h and then stimulated with oxLDL (100 $\mu\text{g}/\text{ml}$) for 24 h before the detection of ICAM-1 and VCAM-1 expression by western blotting. Band densities were quantified and relative protein levels are presented as the mean \pm SD from three independent experiments. * $P < 0.05$ and ** $P < 0.01$ vs. low glucose conditions without oxLDL. EC, endothelial cells; oxLDL, oxidized low-density lipoprotein; ICAM-1, intercellular adhesion molecule 1; VCAM-1, vascular cell adhesion molecule-1; Glu, glucose.

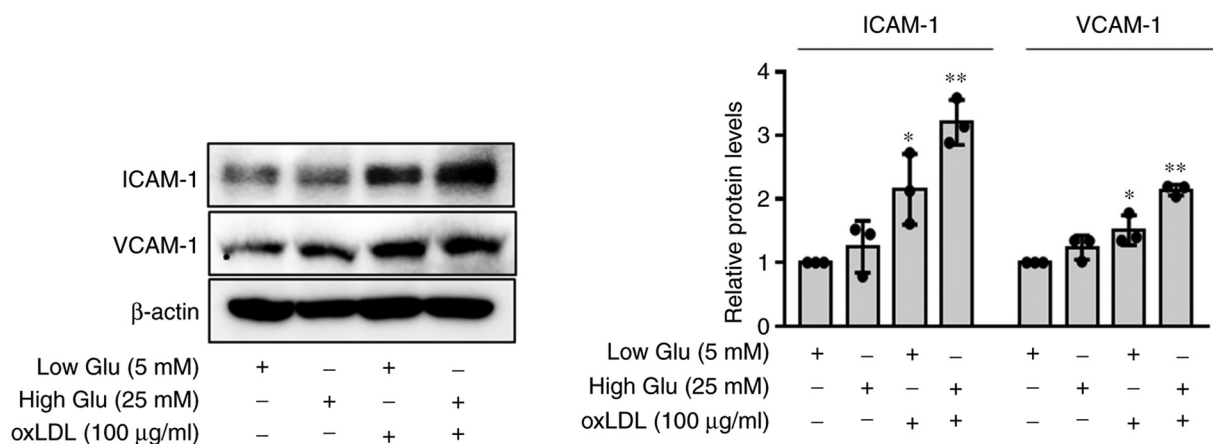


Figure S2. oxLDL significantly increases the levels of nucleotide-binding domain and leucine-rich repeat containing family, pyrin domain-containing 3 activation and p-p38, FOXO-1 and TXNIP under high Glu conditions. ECs were cultured under low glucose (5 mM) or HG (25 mM) conditions for 48 h before being stimulated with oxLDL (100 μ g/ml) (A) for 30 min for the detection of p38 phosphorylation, (B) for 8 h for the detection of FOXO-1 or (C) for 12 h for the detection of TXNIP. After the indicated times, protein levels were measured in the cell lysates by western blotting. Band densities were quantified and relative protein levels are presented as the mean \pm SD from three independent experiments. * P <0.05 and ** P <0.01 vs. low glucose conditions without oxLDL. oxLDL, oxidized low-density lipoprotein; p-, phosphorylation; FOXO1, forkhead box O1; TXNIP, thioredoxin interacting protein; Glu, glucose.

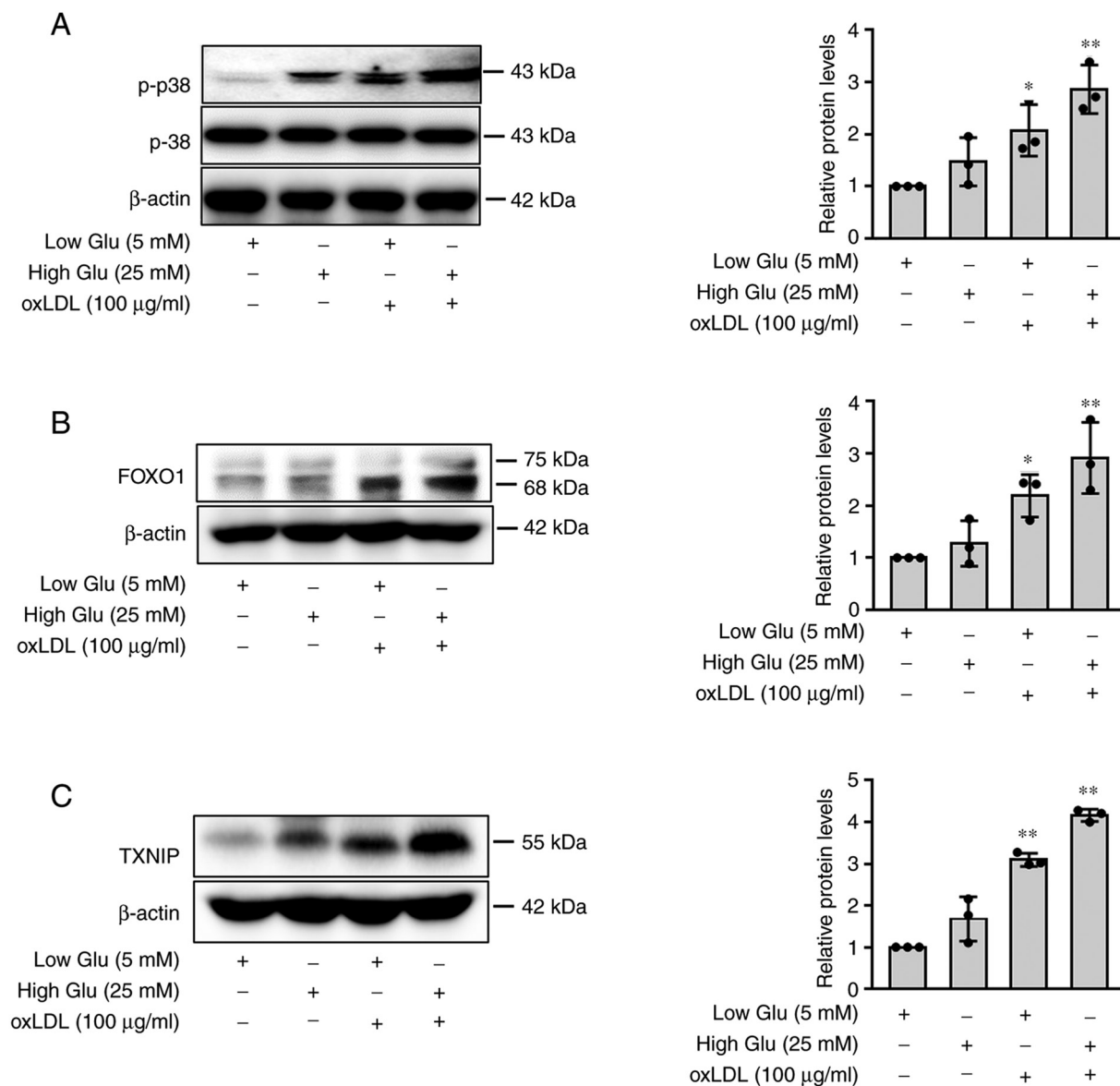


Figure S3. Knockdown efficiency of TXIP siRNAs in ECs. ECs were transfected with control siRNA (100 nM) or TNXIP siRNA (100 nM), exposed to HG (25 mM) for 48 h and then stimulated with oxLDL (100 μ g/ml) for an additional 12 h. The effectiveness of knockdown was determined by western blotting. Band densities were quantified and the relative protein levels are presented as the mean \pm SD from three independent experiments. ***P<0.001 vs. untreated control siRNA-transfected group; ###P<0.001 vs. High Glu- + oxLDL-treated cells in the control siRNA-transfected group. TXIP, thioredoxin interacting protein; si, small interfering; EC, endothelial cells; oxLDL, oxidized low-density lipoprotein; CTRL, control.

