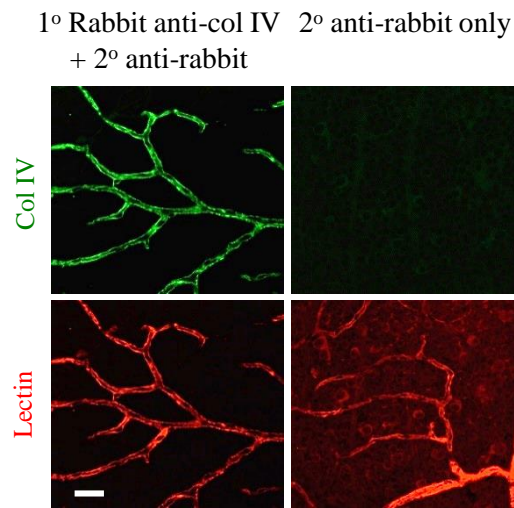
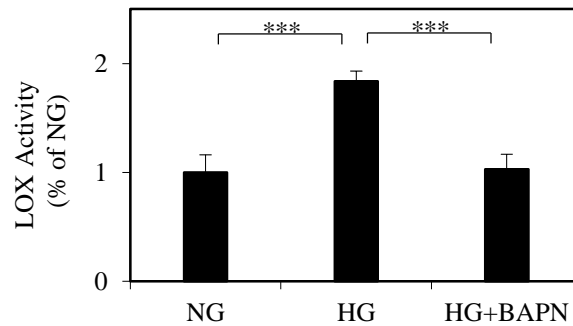


**SUPPLEMENTARY FIGURE 1. Specificity of NF-κB immunostaining.** Representative fluorescence images of ECs labeled with anti-NF-κB p65 and phalloidin indicate increased nuclear translocation of NF-κB in TNF- $\alpha$ -treated EC cultures (positive control) and a lack of nonspecific binding of secondary antibody. Scale bar: 30  $\mu$ m.



**SUPPLEMENTARY FIGURE 2. Specificity of collagen IV immunostaining.** Representative fluorescence images of whole mount mouse retinal capillaries labeled with anti-collagen IV or secondary antibody alone indicate lack of nonspecific binding of the secondary antibody. Lectin is an EC-specific marker. Scale bar: 30  $\mu$ m.



**SUPPLEMENTARY FIGURE 3. HG enhances LOX activity in retinal ECs.** LOX activity assay shows that HG-treated retinal ECs exhibit a ~two-fold greater (\*\*\*,  $p < 0.001$ ) LOX activity than NG-treated cells. The HG-induced increase in LOX activity was suppressed by BAPN (0.1 mM), a specific and irreversible inhibitor of LOX activity. LOX activity levels were normalized with respect to NG levels. Significance was determined by ANOVA, followed by Tukey's post-hoc analysis.