



Supplementary Materials

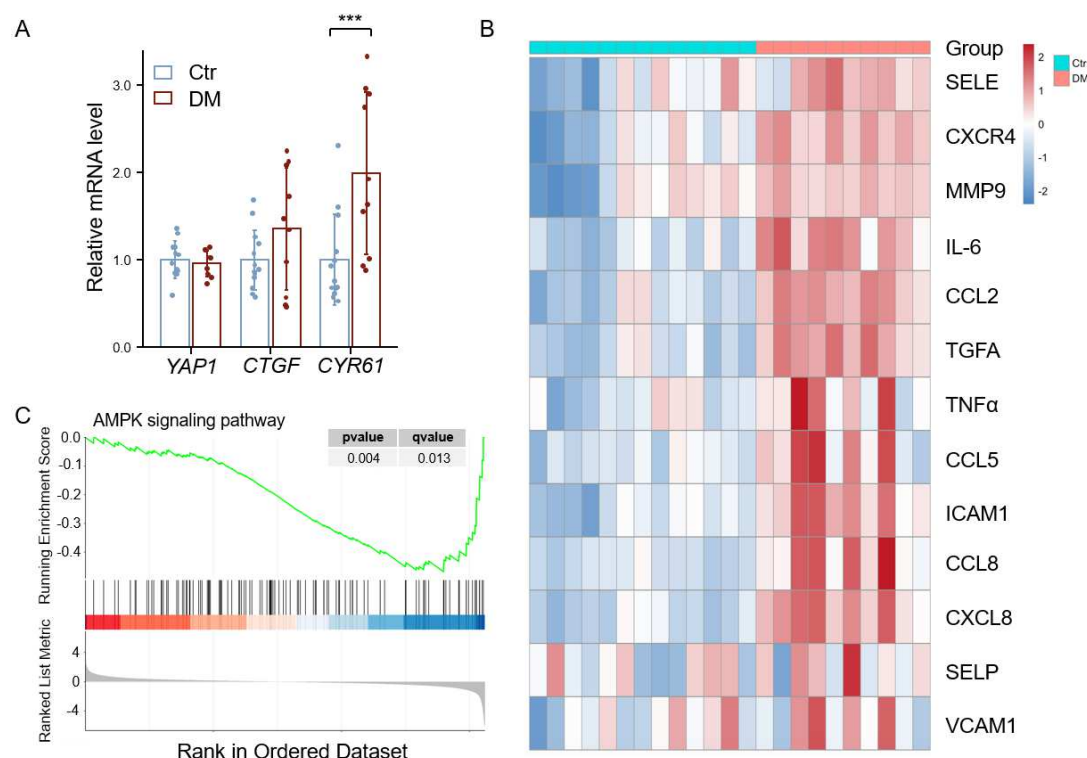


Figure S1. The expression of YAP signaling in diabetic coronary artery lesions. **(A)** The relative expression level of YAP target genes (CTGF and CYR61) in diabetic-hypercholesterolemic pigs (DM) compared with hypercholesterolemic pigs (Ctr). **(B)** Differential expression heatmap of vascular inflammatory factors including chemokines, adhesion molecules, cytokines and formins. **(C)** GSEA result of KEGG pathway: AMPK signaling pathway downregulated in diabetic group. GSEA: Gene set enrichment analysis; KEGG: Kyoto Encyclopedia of Genes and Genomes. Data are means \pm SD. *** $p < 0.001$.

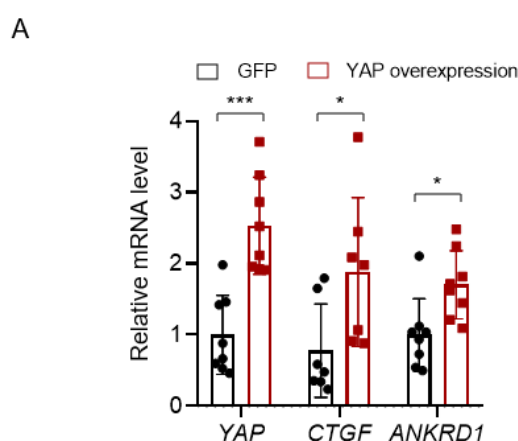


Figure S2. Expression efficiency of YAP adenovirus in isolated aortic rings. **(A)** Quantification of the mRNA expression of YAP and target genes (CTGF and ANKRD1) in isolated aortic rings infected by YAP adenovirus. Data are means \pm SD. * $p < 0.05$, *** $p < 0.001$.

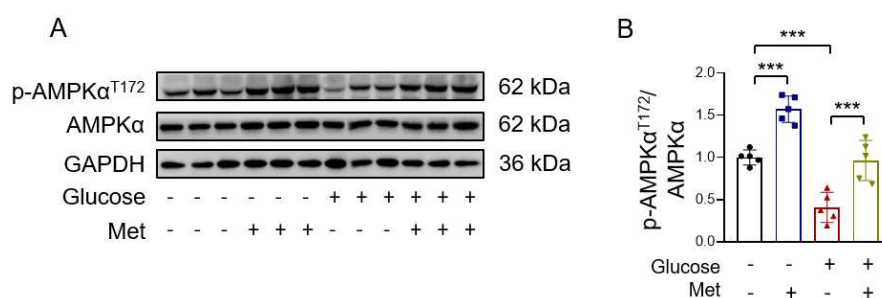


Figure S3. Metformin reverses high glucose-induced inhibition of AMPK phosphorylation in HUVECs. **(A, B)** Representative immunoblots **(A)** and quantification of AMPK phosphorylation **(B)** in HUVECs treated with 30 mM glucose and 10 mM metformin (Met). Data are means \pm SD. *** $p < 0.001$.

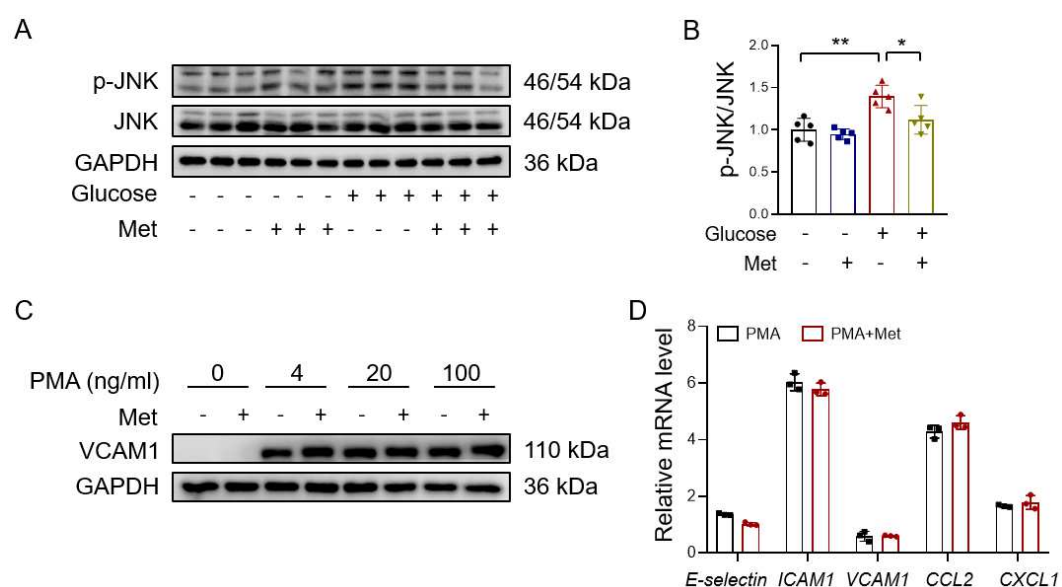


Figure S4. Metformin reduces vascular inflammation through YAP-JNK pathway. **(A, B)** Representative immunoblots **(A)** and quantification of JNK phosphorylation **(B)** in HUVECs treated with 30 mM glucose and 10 mM metformin (Met). **(C)** Representative immunoblots of VCAM1 and GAPDH in HUVECs treated with metformin and different concentrations of JNK stimulator PMA. **(D)** Quantification of the mRNA expression of pro-inflammatory genes (E-selectin, ICAM-1, VCAM-1, CCL2 and CXCL1) in HUVECs treated with PMA and metformin. Data are means \pm SD. * $p < 0.05$, ** $p < 0.01$.