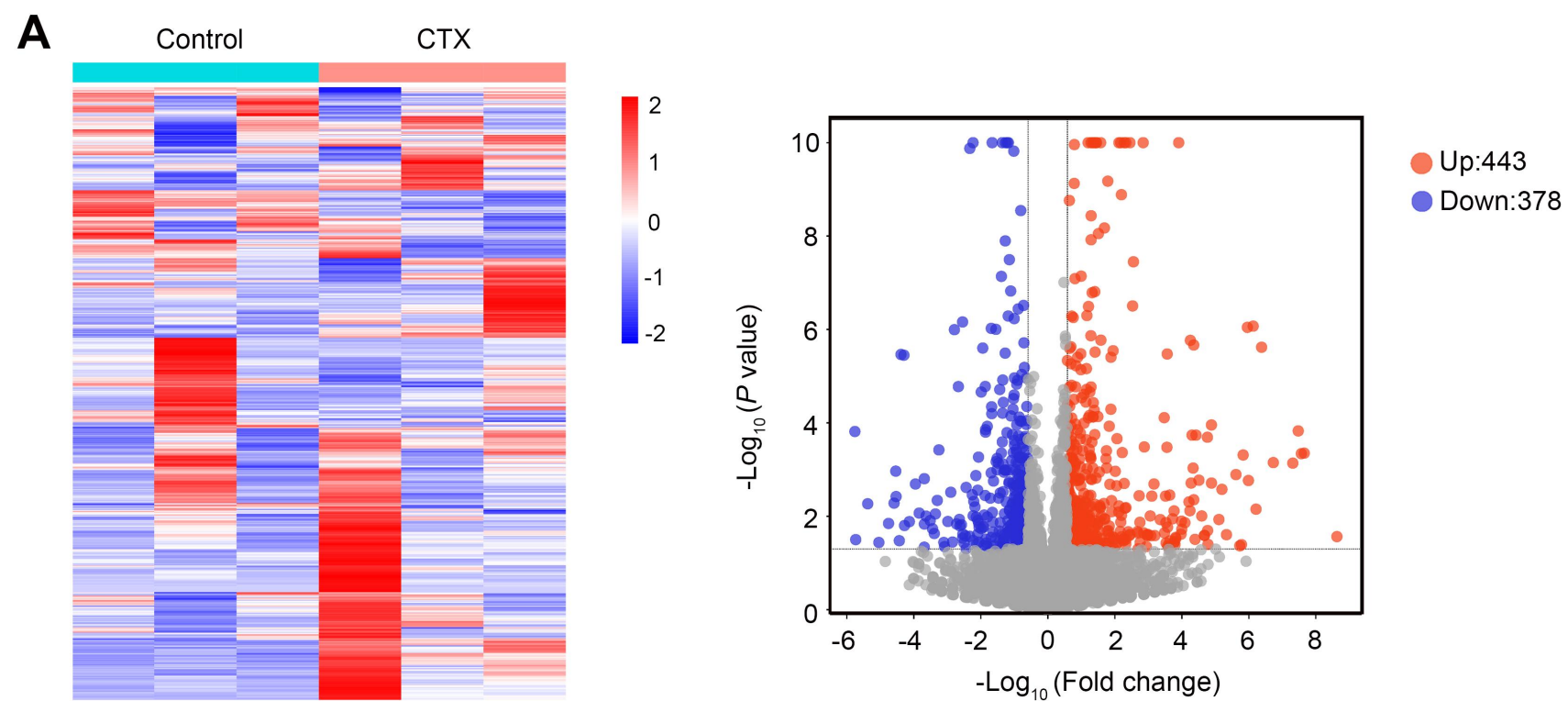
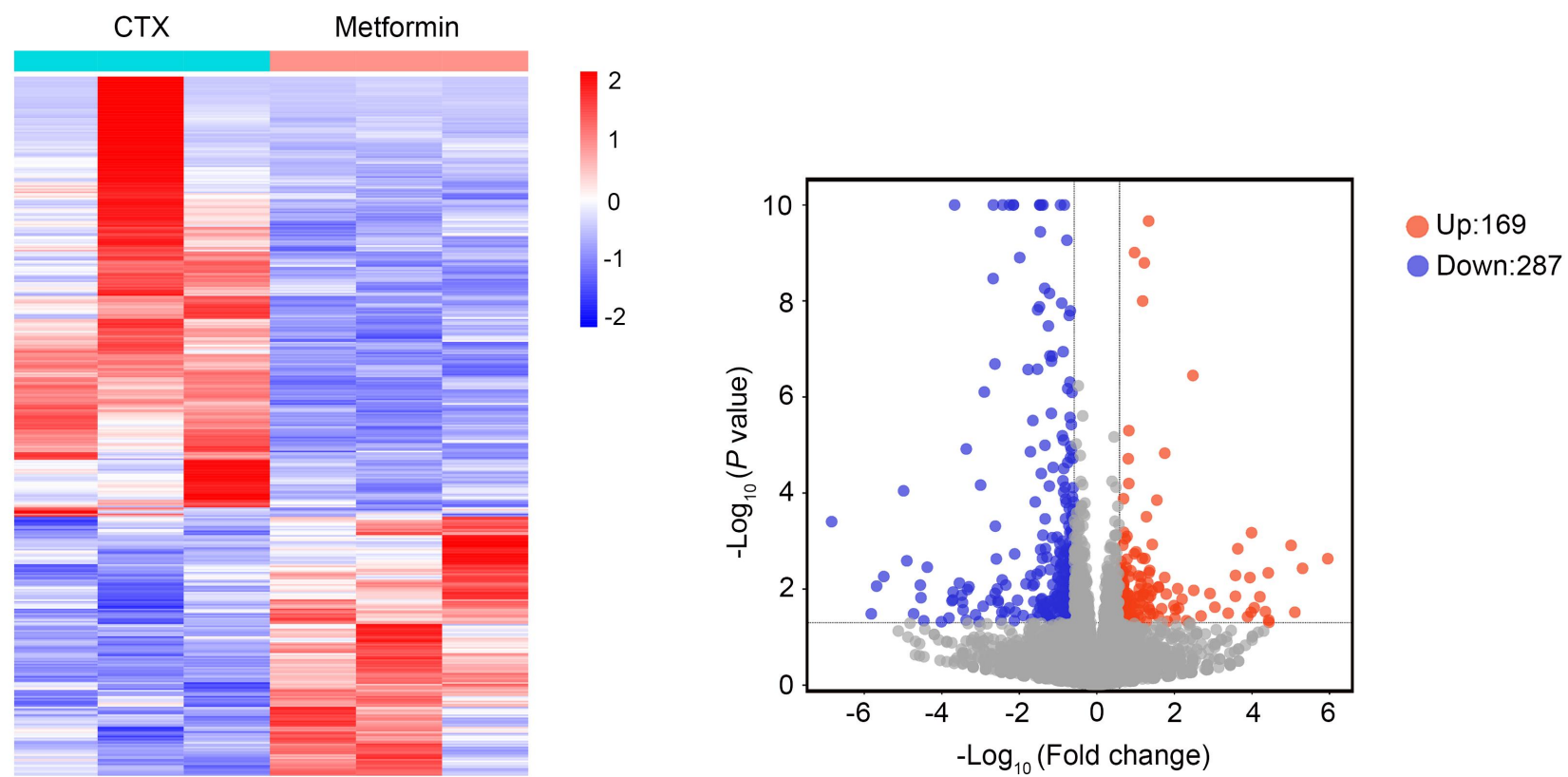
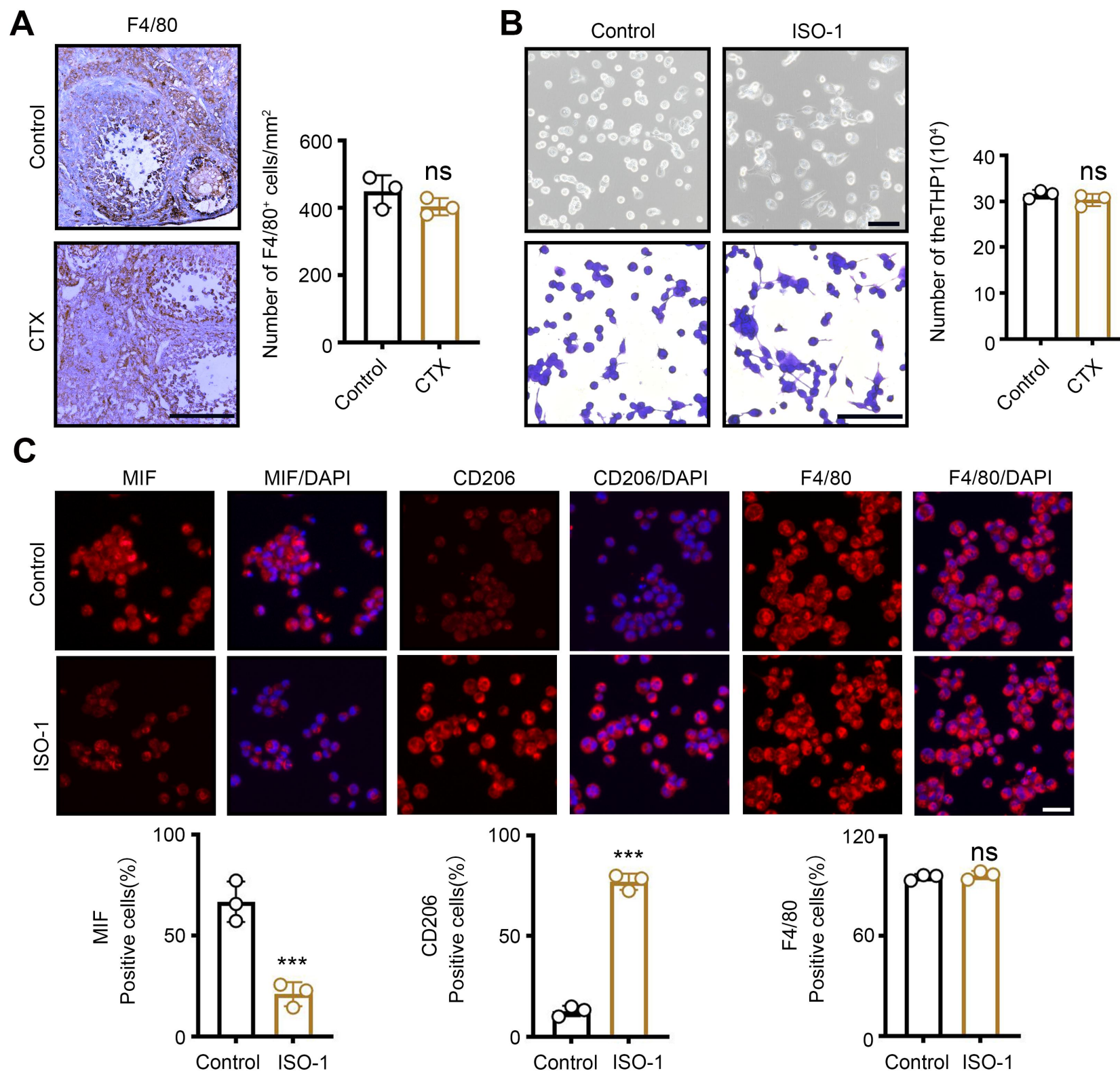




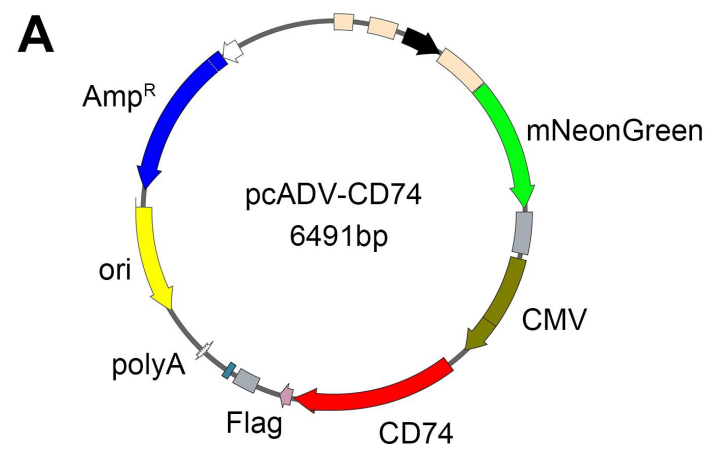
**Supplemental Figure S1.** DEG enrichment analysis of the ovaries of mice treated with control and CTX-treated mice (n=3 mice per group). Heatmaps showing the DEGs. DEGs, differentially expressed genes.

**A**

**Supplemental Figure S2.** DEG enrichment analysis of the ovaries of mice treated with CTX alone or CTX+ metformin mice (n=3 mice per group). Heatmaps showing the DEGs. DEGs, differentially expressed genes.



**Supplemental Figure S3.** The effect of MIF on macrophage recruitment and polarization. (A) Immunostaining for F4/80 expression in ovaries of CTX-treated and control ovaries. (B) Morphological changes in THP-1 Cells treated with the ISO-1(20μM) for 24 h. (B) Count of macrophage number. (C) Immunofluorescence staining for MIF, CD206 and F4/80 expression. Scar bar=100 μm. Scale bars: 100 μm. P>0.05 and \*\*\*P<0.001 for the indicated comparisons



**Supplemental Figure S4.** Viral expression vector backbone for overexpressing CD74.