Figure S1. Recombinant SOX12 could restore the malignant phenotype of ESCC cells. (A) Recovery of SOX12 expression increased the colony formation rate of ESCC cells. (B) Treatment with recombinant SOX12 restored the aggressive phenotype of ESCC cells. (C) Recombinant SOX12 recovered the expression of p-JAK2$^{Tyr1007+1008}$ and p-STAT3^{Tyr705} by immunofluorescence detection (magnification, x200). $^{*}P<0.05$ vs. Scramble or shRNA1+SOX12. SOX12, sex-determining region Y box 12; ESCC, esophageal squamous cell carcinoma; JAK2, Janus kinase 2; STAT3, signal transducer and activator of transcription 3; p-, phosphorylated; shRNA, short hairpin RNA.

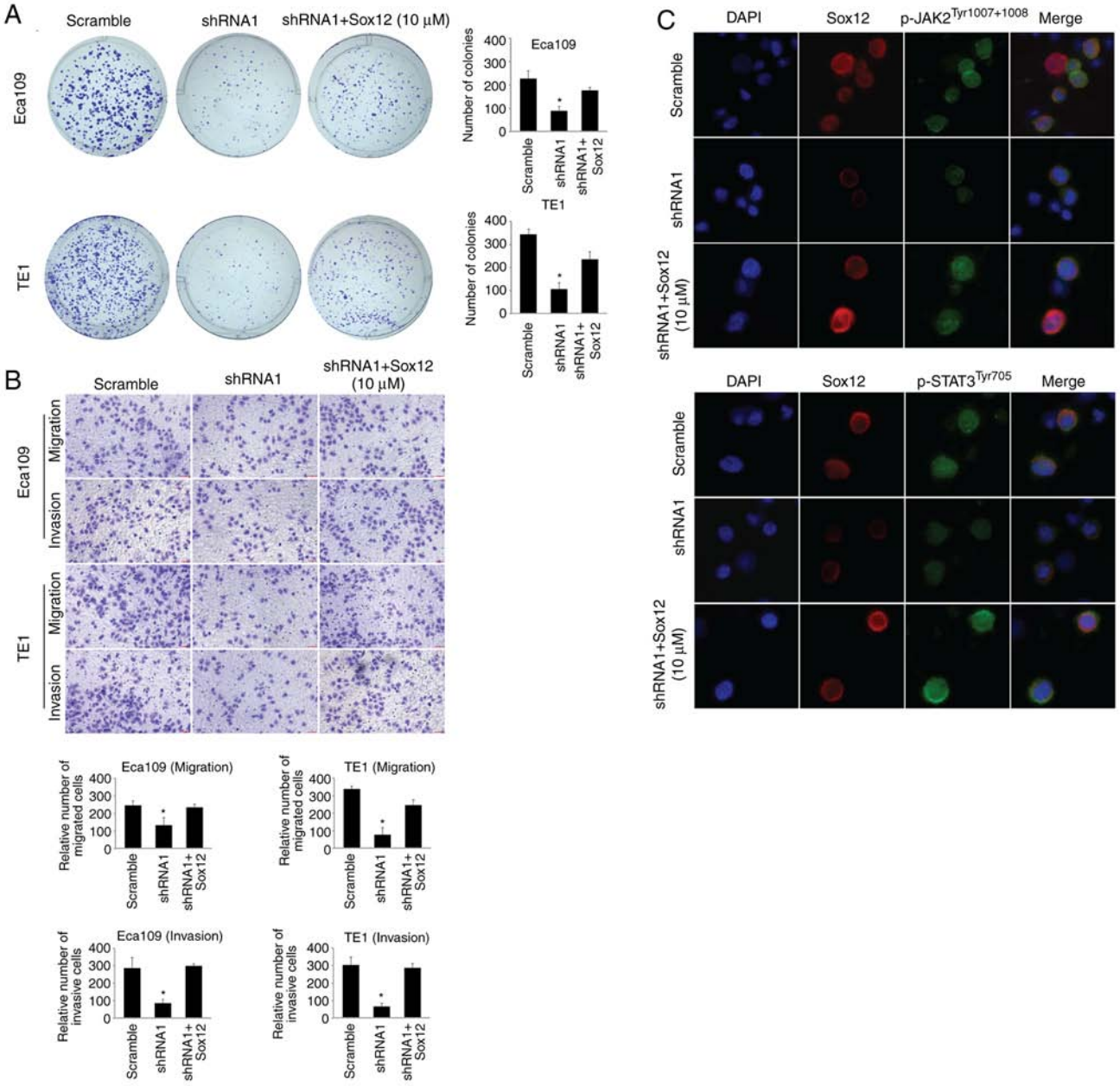

Figure S2. Blocking the JAK2/STAT3 signaling pathway inhibits the colony formation and motility of ESCC cells *in vitro*. (A) WP1066 (5 μM) could inhibit the protein expression of JAK2/STAT3 signaling pathway. (B) WP1066 (5 μM) decreased the colony formation rate of ESCC cells. (C) WP1066 (5 μM) inhibited the migration and invasion abilities of ESCC cell lines. *P<0.05 vs. Blank or DMSO group. JAK2, Janus kinase 2; STAT3, signal transducer and activator of transcription 3; ESCC, esophageal squamous cell carcinoma; p-, phosphorylated; shRNA, short hairpin RNA.