

Figure S1. Expression of DAZAP1 in gastric cancer tissues is higher than that in normal gastric tissue. DAZAP1 expression levels in normal tissues and tumors according to (A) FireBrowse and (B) UALCAN databases. Missing, cancer types for which no normal tissue sample data was available in the FireBrowse dataset being analyzed. DAZAP1, deleted in azoospermia-associated protein 1; STAD, stomach Adenocarcinoma; RSEM, RNA-Seq by Expectation-Maximization; TCGA, The Cancer Genome Atlas;

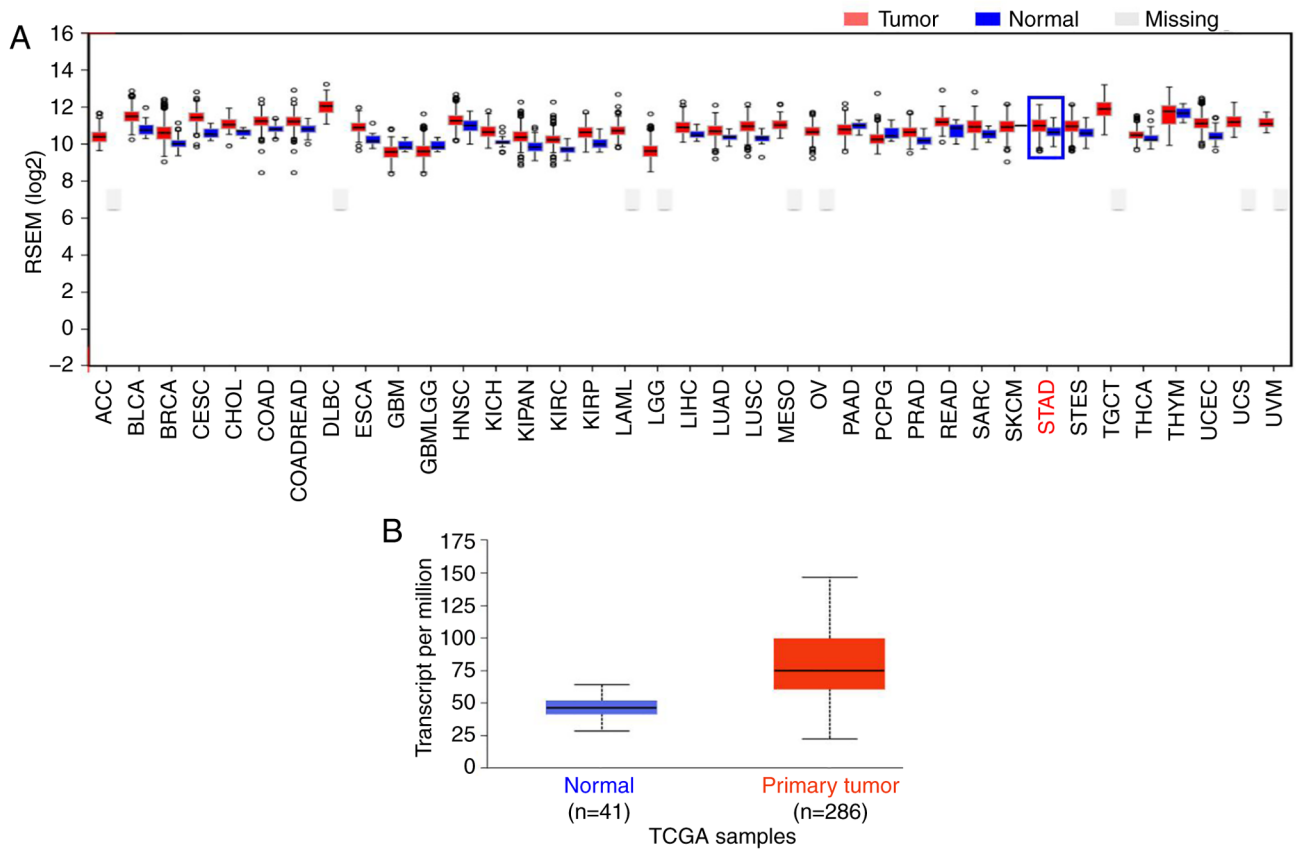


Figure S2. Expression analysis of DAZAP1 in gastric cancer cells. DAZAP1 was (A) overexpressed and (B) suppressed compared with the negative control (Vector or Scr-siRNA) in gastric cancer cells. (C) Knockdown efficiency of DAZAP1-shRNA in AGS cells. ****P<0.001 vs. vector. Scr, scramble; si, small interfering; p, pool; DAZAP1, deleted in azoospermia-associated protein 1.

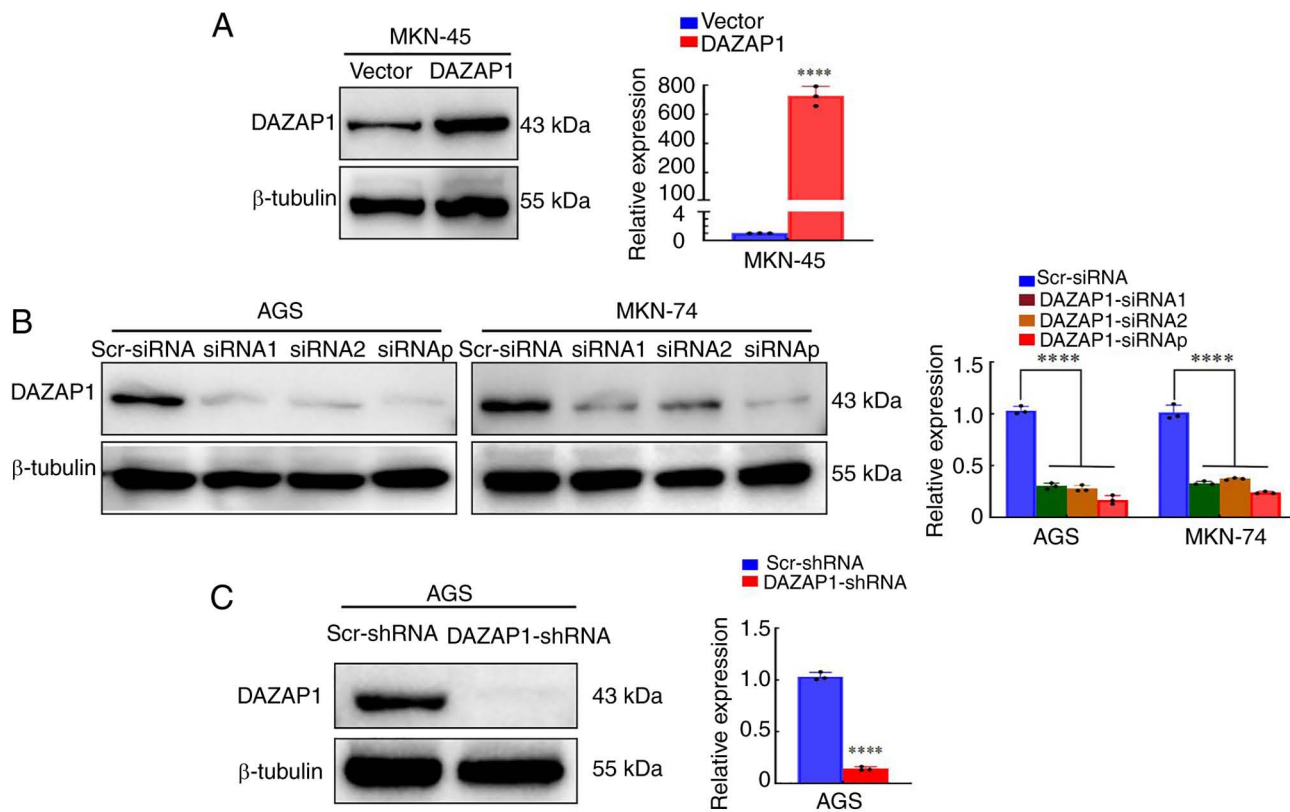


Figure S3. Expression analysis of NOTCH1 and JAG1 in gastric cancer cells. (A) Overexpression and knockdown efficiency of NOTCH and (B) JAG1 plasmids or siRNAs and siRNAp using western blotting and quantitative PCR analysis. (C) Knockdown efficiency of NOTCH1-shRNA in AGS cells. $^{***}P < 0.01$, $^{****}P < 0.001$ vs. vector. sh, short hairpin; scr, scramble; si, small interfering; p, pool.

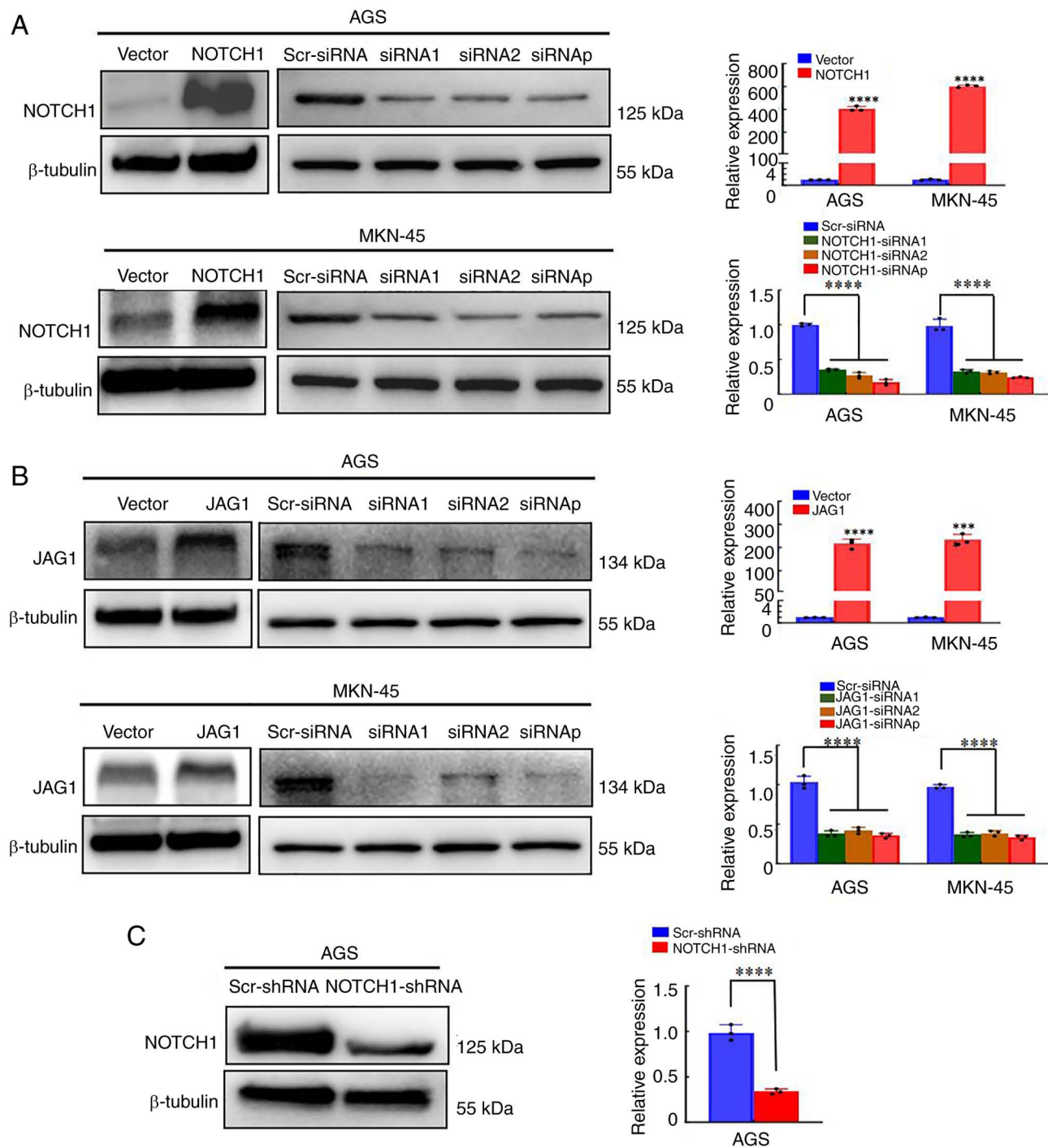


Figure S4. DAZAP1 regulates NOTCH1 or JAG1 expression levels to affect migration/invasion via epithelial-mesenchymal transition in GC cells. The wound healing assay in AGS cells confirmed that DAZAP1 regulated (A) NOTCH1 and JAG1 (B). Scale bar, 100 μm . Transwell invasion assay confirmed that DAZAP1 regulates NOTCH1 (C) and JAG1 (D) in MKN-45 and AGS cells, Scale bar, 150 μm . Expression of epithelial marker E-cadherin and mesenchymal markers vimentin and N-cadherin was detected by western blotting with β -tubulin as the internal control in MKN-45 cells. The western blotting in MKN-45 cells confirmed that DAZAP1 regulates NOTCH1 (E) and JAG1 (F). *** $P < 0.01$, **** $P < 0.001$. DAZAP1, deleted in azoospermia-associated protein 1; GC, gastric cancer; scr, scramble; si, small interfering.

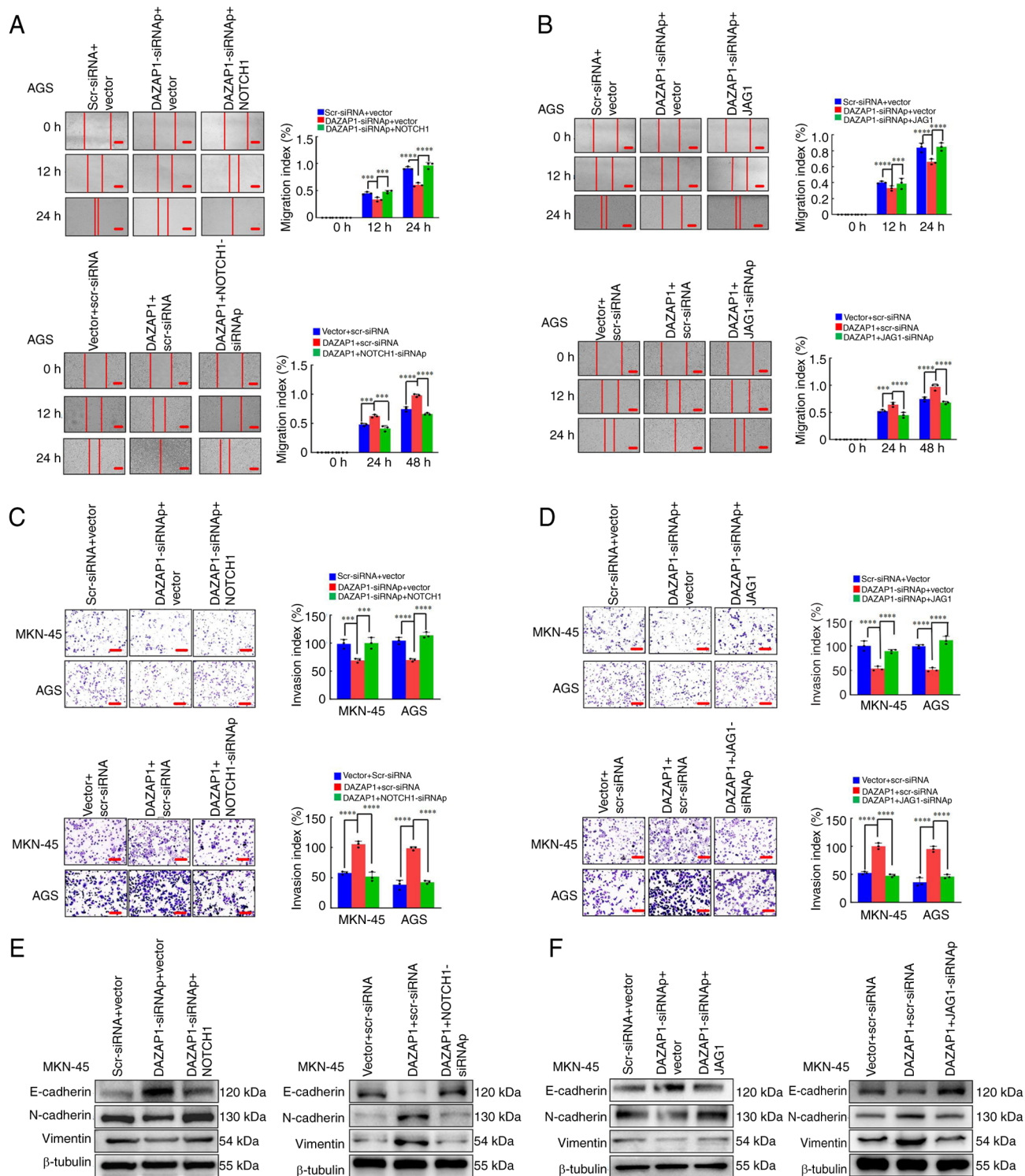


Figure S5. DAZAP1 promotes NOTCH1 and JAG1 expression to alter migration and invasion in GC cells. (A) Wound healing assay was used to detect motility in MKN-45 and AGS cells. (B) Migration and invasion assay was conducted in MKN-45 and AGS cells. Knockdown efficiency of DAZAP1-shRNA and NOTCH1-shRNA in AGS cells. ***P<0.01, ****P<0.001. DAZAP1, deleted in azoospermia-associated protein 1; GC, gastric cancer; sh, short hairpin; scr, scramble; si, small interfering; p, pool.

