Figure S1: Consistent data from RNA-seq analysis (present study) and published literature (7,9,10) on known targets of FoxQ1. (**A**) RNA-seq analysis of genes associated with epithelial-mesenchymal transition (7). *CDH1, E-cadherin; CDH2, N-cadherin; FN1, fibronectin 1.* (**B**) RNA-seq analysis of genes involved in breast cancer stemness and chemoresistance (9). *CST6, cystatin 6; SEMA3A, semaphorin 3A*; *PDGFRA, platelet-derived growth factor receptor alpha*; *JAM3, junctional adhesion molecule 3*; *ADAM9, ADAM metallopeptidase domain 9*; *THBS1, thrombospondin 1*; *ZEB2, zinc finger E-box binding homeobox 2*; *FOXA1, forkhead box A1; EDN1, endothelin 1.* (**C**) RNA-seq analysis of genes related to breast cancer stemness (10). *DACH1, dachshund homolog 1; ZEB1, zinc finger E-box binding homeobox 1; TWIST2, twist basic helix-loop-helix transcription factor 2.* Results shown are mean ± S.D. ($n = 3$). *$P < 0.05$ by two-sided Student's t-test.
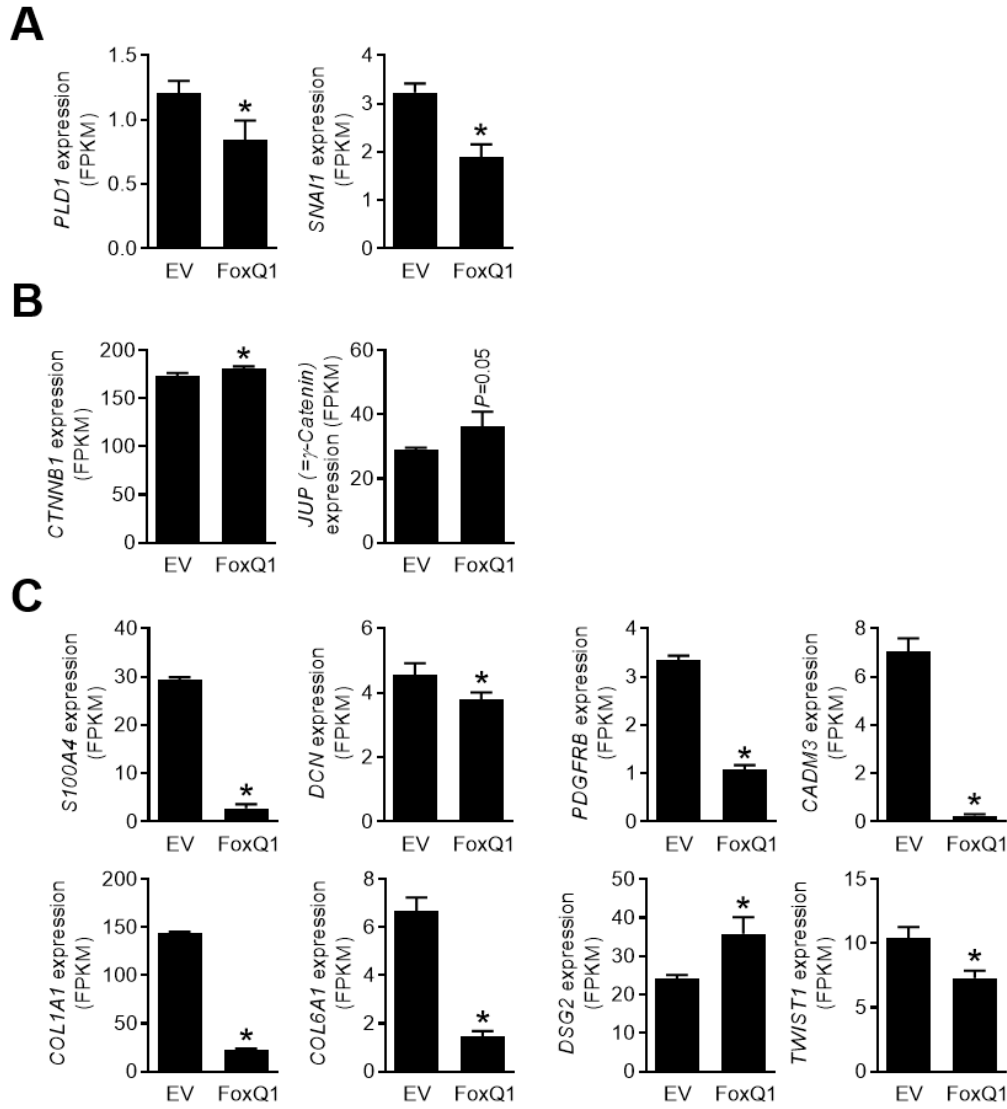
Figure S2: Inconsistent data between RNA-seq analysis (present study) and published literature (7,9,14). **(A-C)** RNA-seq analysis of genes not consistent with the published literatures (7,9,14). Results shown are mean ± S.D. (n = 3). *P < 0.05 by two-sided Student's t-test. *PLD1, phospholipase D1; SNAI1, snail family transcriptional repressor 1; CTNNB1, catenin beta 1; S100A4, S100 calcium binding protein A4; DCN, decorin; PDGFRB, platelet-derived growth factor receptor beta; CADM3, cell adhesion molecule 3; COL1A1, collagen type I alpha 1; COL6A1, collagen Type VI alpha 1; DSG2, desmoglein 2; TWIST1, twist basic helix-loop-helix transcription factor 1.*
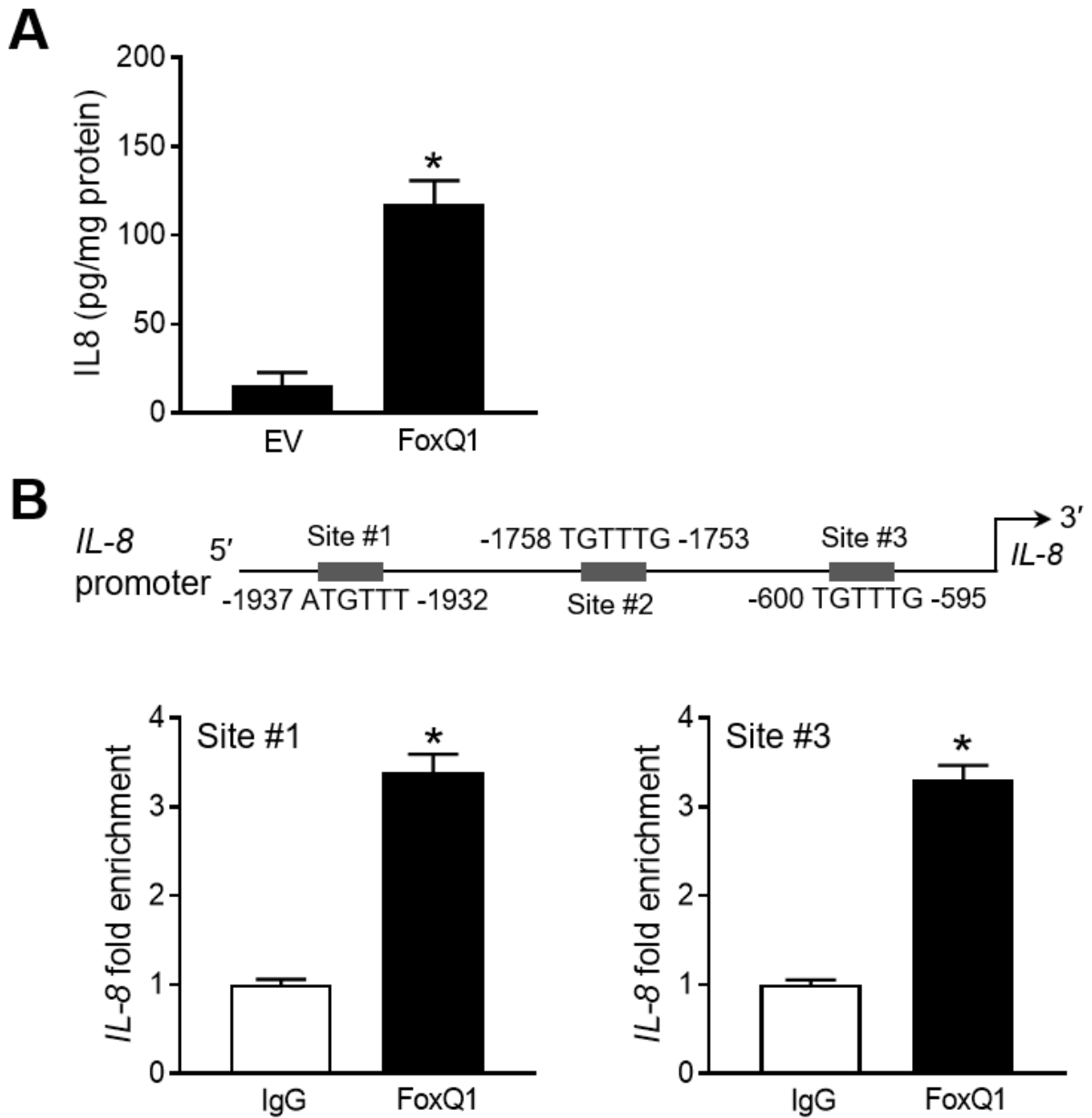
Figure S3: FoxQ1 regulated *IL-8* expression in MCF-7 cells. **(A)** Quantification of IL-8 secretion in the media of EV and FoxQ1 overexpressing MCF-7 cells. Data shown are mean ± S.D. ($n = 3$). *P < 0.05 by two-sided Student's t test. **(B)** ChIP assay for FoxQ1 recruitment at the promoter region of *IL-8* in MCF-7 cells. The results shown are mean ± S.D. ($n = 3$). *P < 0.05 by two-sided Student's t-test. Experiments were done twice with similar results.