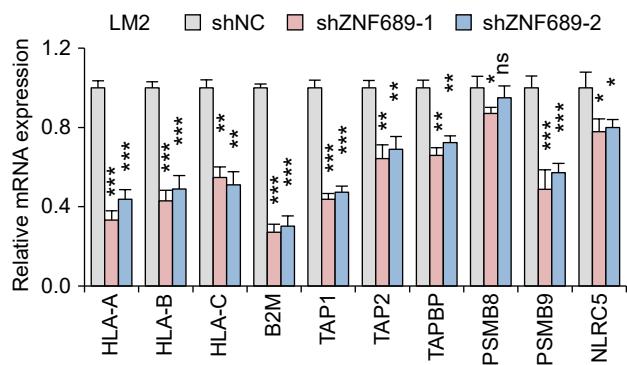
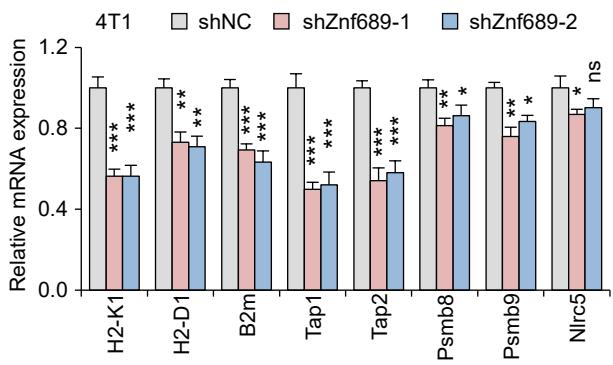


Supplementary information, Fig. S9

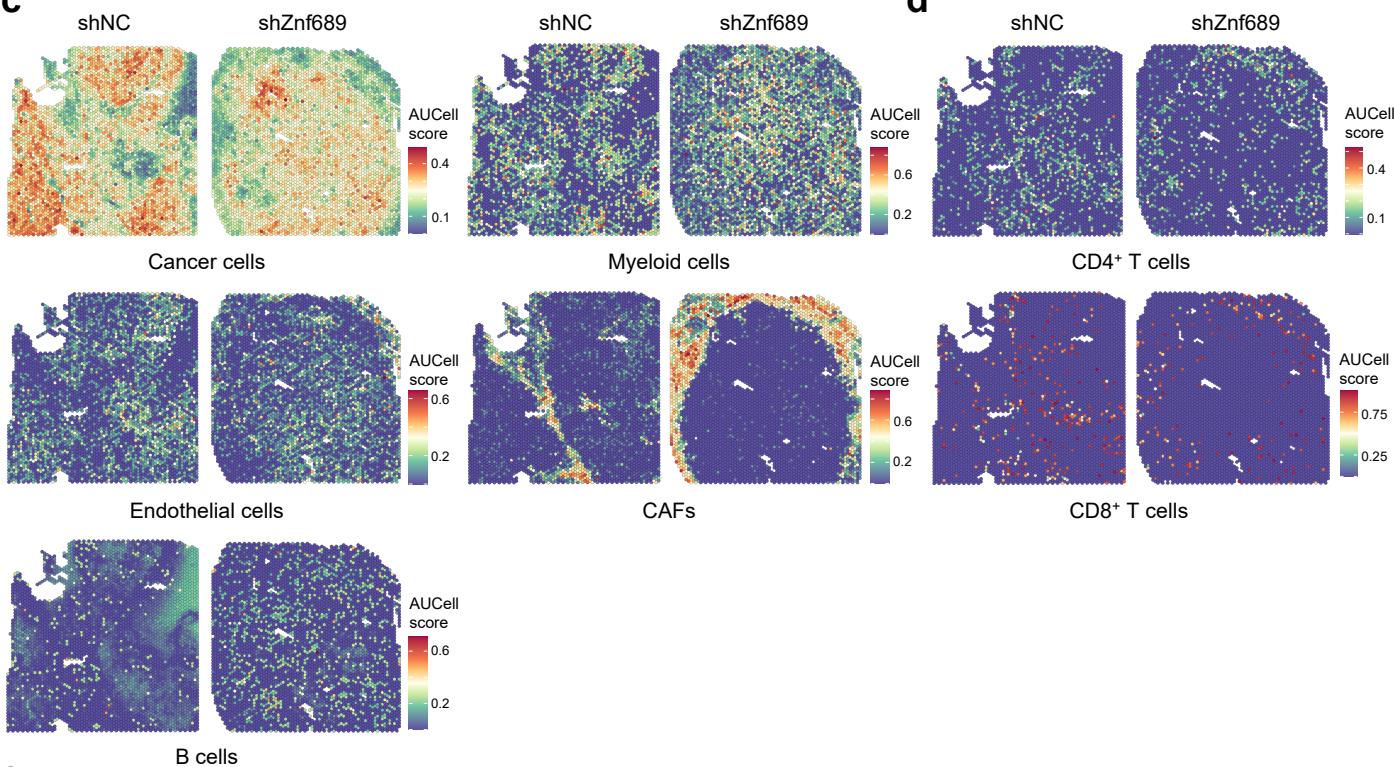
a



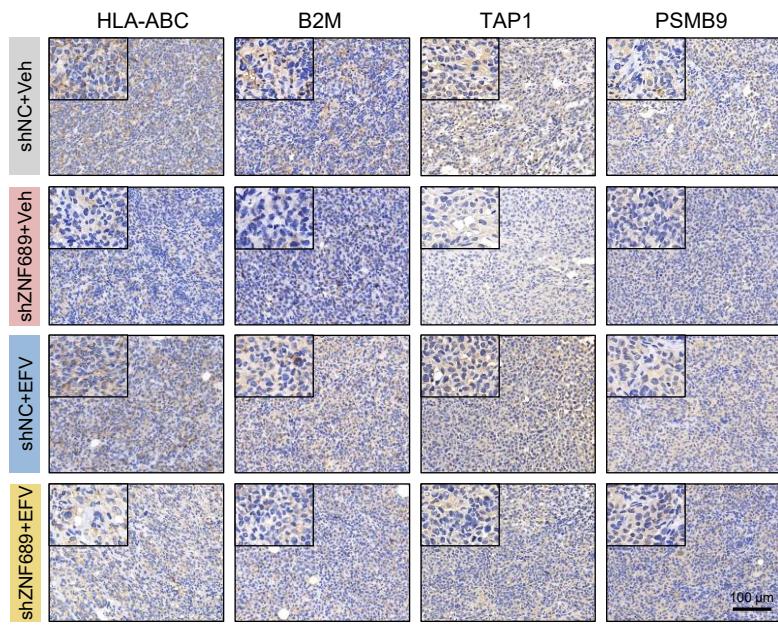
b



c



e



Supplementary information, Fig. S9 ZNF689 deficiency impairs antigen presentation in TNBC.

a, b RT-qPCR analysis of MHC-I antigen processing and presentation-associated genes in LM2 (**a**) and 4T1 (**b**) cells. **c** Signature scores of cancer cells, myeloid cells, endothelial cells, CAFs and B cells in the spots of shNC and shZnf689 tumors. **d** Signature scores of CD4⁺ T cells and CD8⁺ T cells in the spots of shNC and shZnf689 tumors. **e** IHC analysis of HLA-ABC, B2M, TAP1, and PSMB9 protein expression with the associated H-score for representative tumors from mice in Fig. 4h. Scale bar, 100 µm. P values were determined using one-way ANOVA. ns, not significant; *p < 0.05, **p < 0.01, ***p < 0.001.