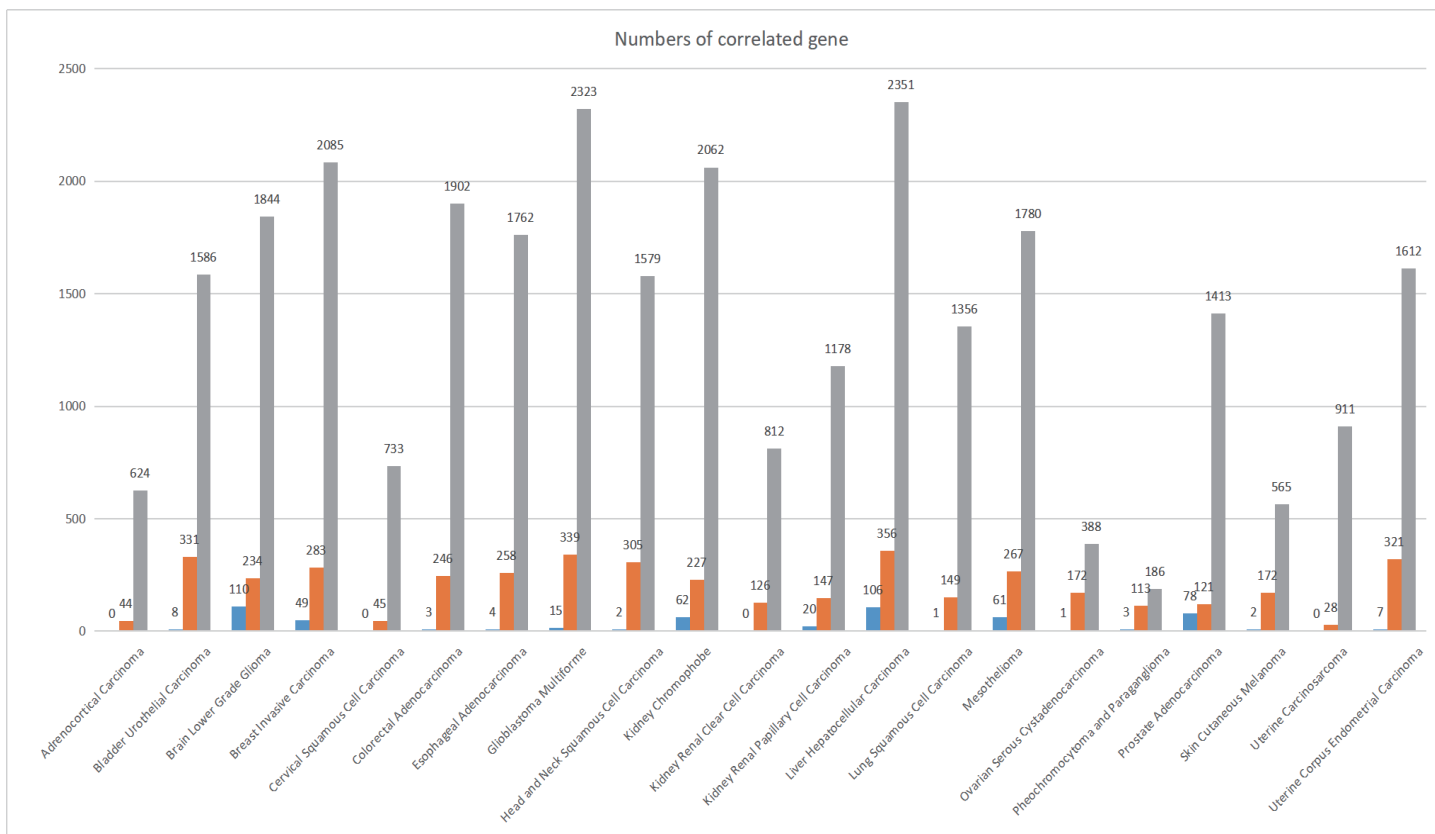
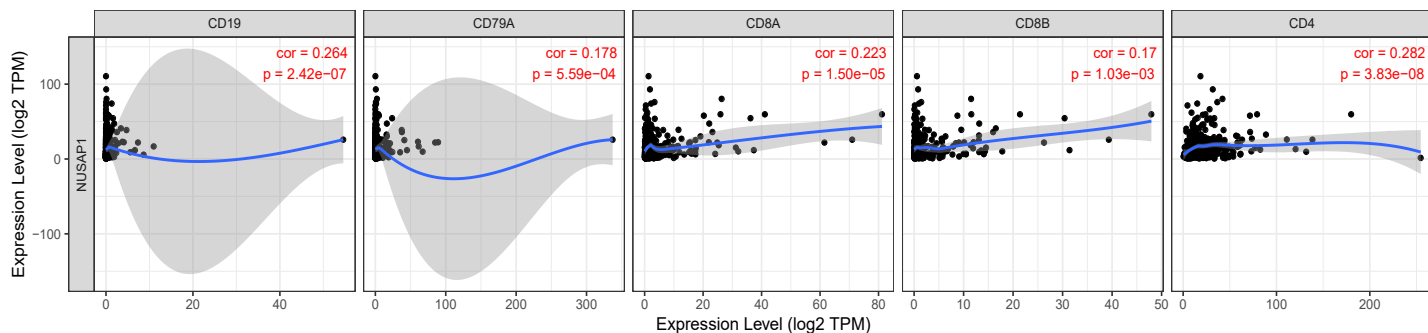
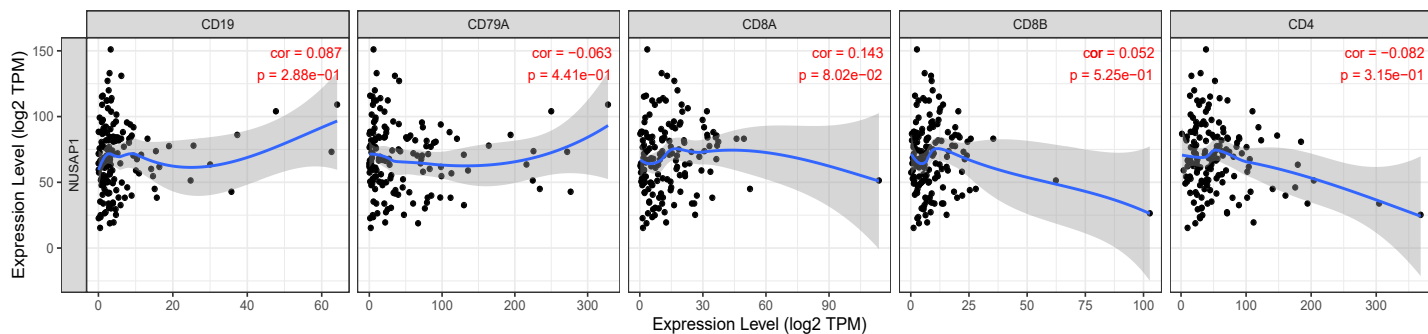


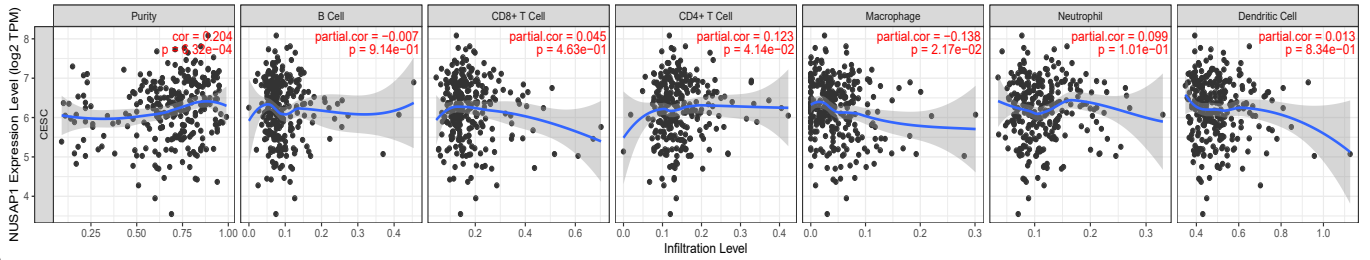
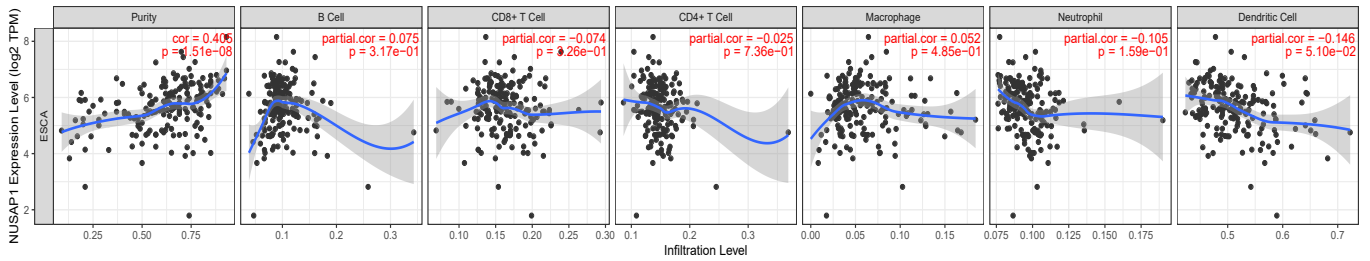
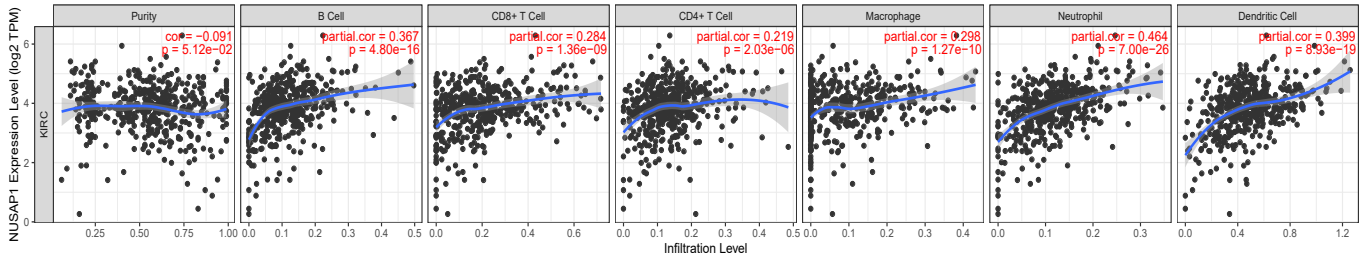
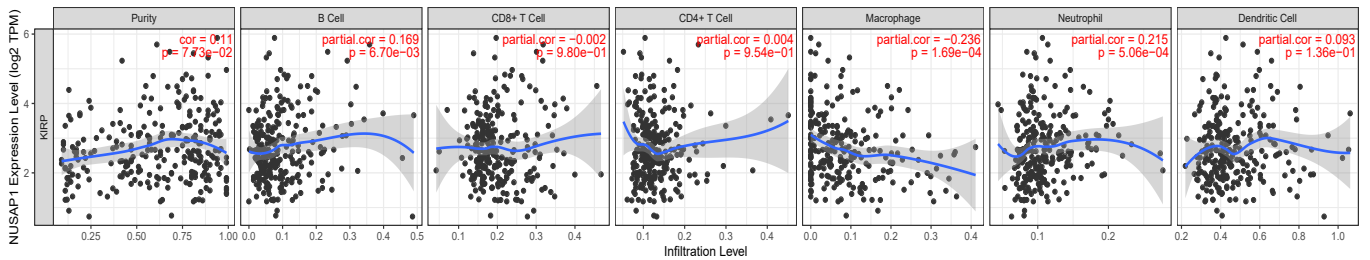
**sFig.1** The level of NUSAP1 mRNA expression in various human tumors and adjacent normal tissues in TIMER across all TCGA tumors (P-value Significant Codes:  $0 \leq \text{***} < 0.001$  ).

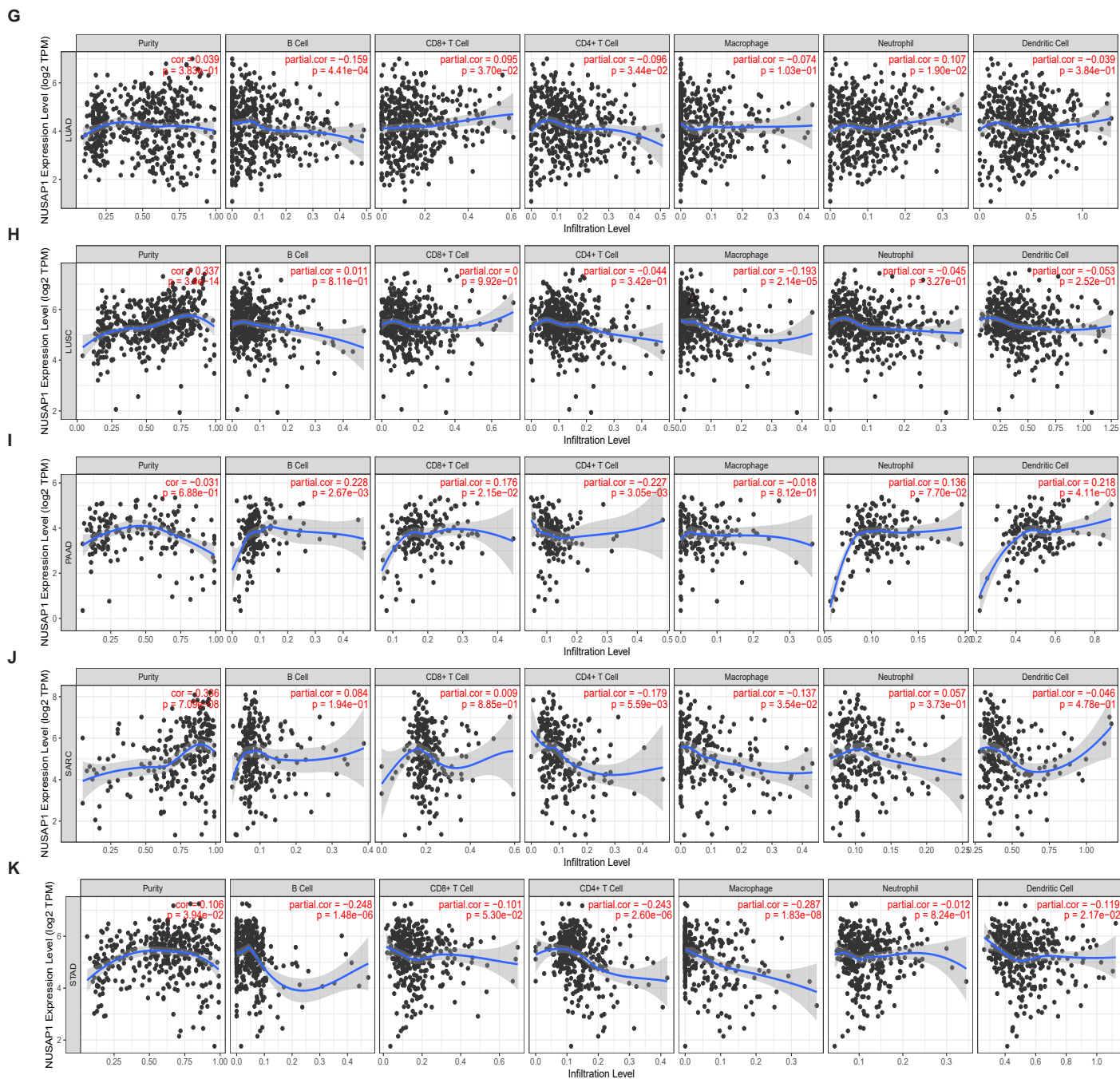


**sFig. 2** General distribution of NUSAP1 co-expressed genes in cancers.  $|r| \geq 0.3$  as low correlation is indicated gray,  $|r| \geq 0.5$  as medium correlation is indicated orange and  $|r| \geq 0.8$  as high correlation is indicated blue.

**A****B**

**sFig.3 A-B** NUSAP1 expression correlated with immune marker sets of B cells, CD8+ T cells and CD4+ T cells in LIHC and TGCT. Scatterplots of correlations between NUSAP1 expression and gene markers of B cells, CD8+ T cells and CD4+ T cells in LIHC (A) and TGCT (B). Markers include CD19 and CD79A of B cells, CD8A and CD8B of CD8+ T cells, CD4 of CD4+ T cells.

**C****D****E****F**



**sFig.3 C-K** Correlation of NUSAP1 expression with immune infiltration level in CESC (Cervical squamous cell carcinoma), ESCA (Esophageal carcinoma), KIRC (Kidney renal clear cell carcinoma), KIRP (Kidney renal papillary cell carcinoma), Lung adenocarcinoma (G), Lung squamous cell carcinoma (H), Pancreatic ductal adenocarcinoma (I), Sarcoma (J), Stomach adenocarcinoma (K).