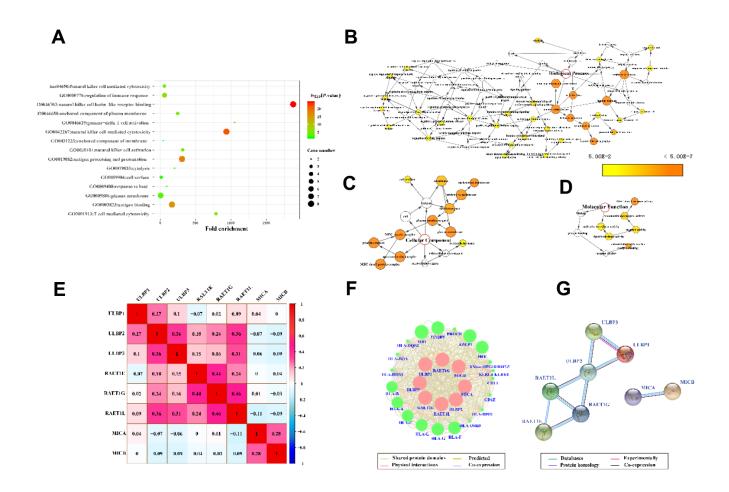
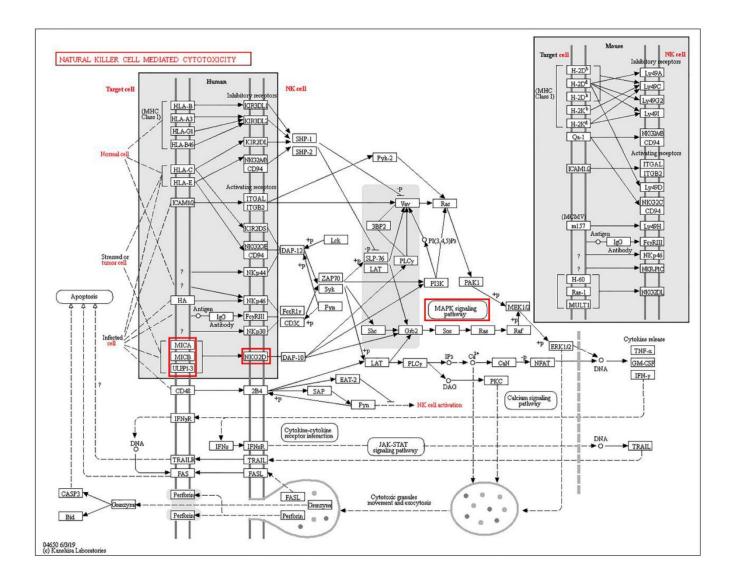
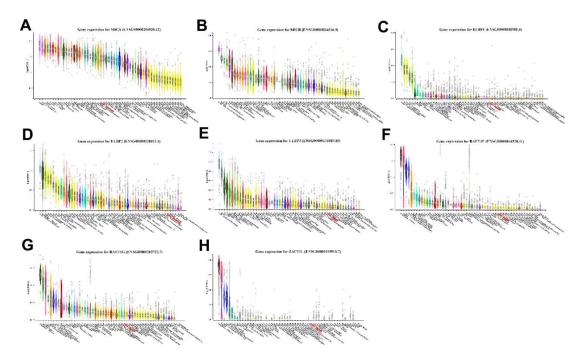
## **SUPPLEMENTARY FIGURES**



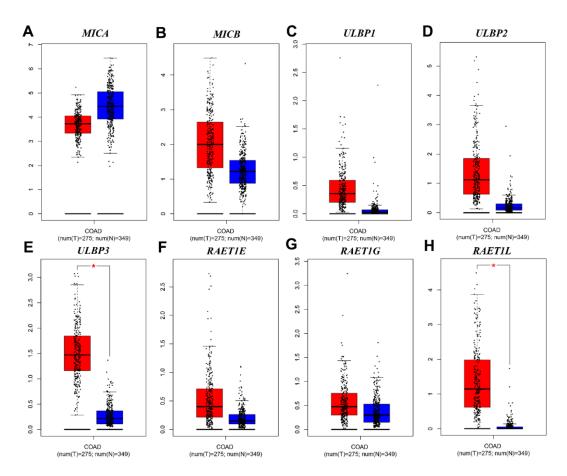
Supplementary Figure 1. Bioinformatic analysis of *NKG2DL* family genes. (A–D) GO term biological function analysis, KEGG analysis and Enriched Gene Ontology directed acyclic graph of *NKG2DL* family genes: (A) GO term biological function analysis and KEGG analysis; Gene Ontology directed acyclic graph for (B) Biological Process (BP), (C) Molecular Function (MF) and (D) Cellular components (CC); (E–G) Pearson's correlations analysis and gene-gene and protein-protein interaction networks of *NKG2DL* genes: (E) Pearson correlation analysis of *NKG2DL* genes. Red indicates a positive correlation and blue indicates a negative correlation. (F) GeneMANIA interaction networks; (G) Protein-protein interaction networks. Notes: GO, gene ontology; KEGG, Kyoto Encyclopedia of Genes and Genomes; *NKG2DL*, Natural Killer Group 2 Member D Ligand; *ULBP*: unique long 16 (UL16)-binding protein; *MIC*: Human Major Histocompatibility Complex (MHC) class I polypeptide-related sequence.



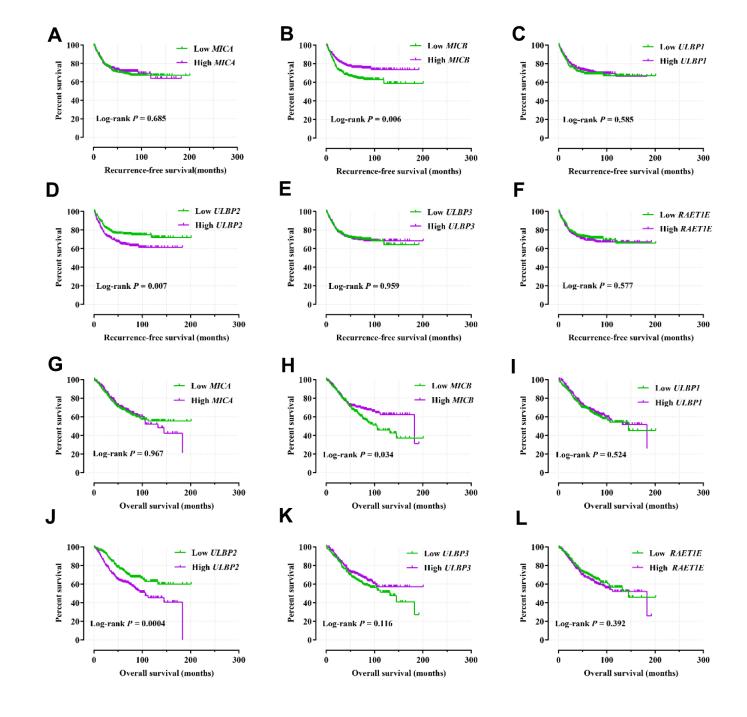
**Supplementary Figure 2. The KEGG pathway of Natural killer cell mediated cytotoxicity**. Notes: KEGG, Kyoto Encyclopedia of Genes and Genomes.



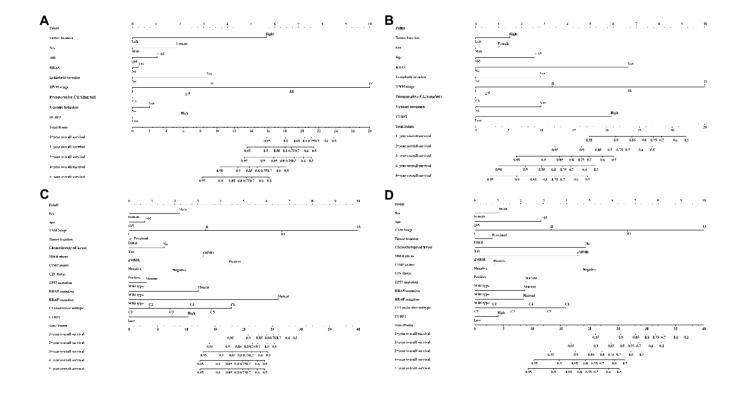
Supplementary Figure 3. NKG2DL genes expression in normal human tissues in the GTEx database. (A) MICA; (B) MICB; (C) ULBP1; (D) ULBP2; (E) ULBP3; (F) RAET1E; (G) RAET1G; (H) RAET1L. Notes: NKG2DL, Natural Killer Group 2 Member D Ligand.



Supplementary Figure 4. The expression level of NKG2DL genes downloaded from GEPIA website in COAD tumor tissue and normal colon tissue. (A) MICA; (B) MICB; (C) ULBP1; (D) ULBP2; (E) ULBP3; (F) RAET1E; (G) RAET1E; (H) RAET1L. Notes: NKG2DL, Natural Killer Group 2 Member D Ligand; GEPIA, Gene Expression Profiling Interactive Analysis; COAD, colon adenocarcinoma.

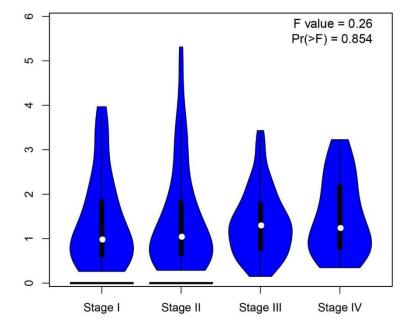


Supplementary Figure 5. Kaplan—Meier survival curves for *NKG2DL* genes in CC of GSE40967 cohort. Notes: RFS stratified by (A) *MICA*; (B) *MICB*; (C) *ULBP1*; (D) *ULBP2*; (E) *ULBP3*; (F) *RAET1E*. OS stratified by (G) *MICA*; (H) *MICB*; (I) *ULBP1*; (J) *ULBP2*; (K) *ULBP3*; (L) *RAET1E*. CC: colon cancer; *NKG2DL*, Natural Killer Group 2 Member D Ligand; *ULBP*: unique long 16 (UL16)-binding protein; *MIC*: Human Major Histocompatibility Complex (MHC) class I polypeptide-related sequence; RFS, recurrence-free survival; OS, overall survival.



## Supplementary Figure 6. Nomogram for predicting the prognosis of COAD patients based on the TCGA cohort and GSE40967 cohort. (A) The prognostic value of COAD RFS; (B) The prognostic value of COAD OS; (C) The prognostic value of CC RFS; (D) The prognostic value of CC OS. Notes: COAD, colon adenocarcinoma; CC: colon cancer; CEA, carcinoembryonic antigen; KRAS, Kirsten rat sarcoma viral

value of CC OS. Notes: COAD, colon adenocarcinoma; CC: colon cancer; CEA, carcinoembryonic antigen; KRAS, Kirsten rat sarcoma viral oncogene. TNM, Tumor Node Metastasis; MMR, mismatch repair; dMMR, deficient mismatch repair, pMMR, proficient mismatch repair; CIN, chromosomal instability; TP53, tumor protein p53; BRAF, B-Raf proto-oncogene, serine/threonine kinase; CIT, Cartes d'Identité des Tumeurs; CIMP, CpG island methylator phenotype; *ULBP*: unique long 16 (UL16)-binding protein; RFS, Recurrence-free survival; OS, overall survival.



**Supplementary Figure 7. Relationship between prognosis-related ULBP2 gene and TNM stage**. Notes: COAD, colon adenocarcinoma; TNM, Tumor Node Metastasis.