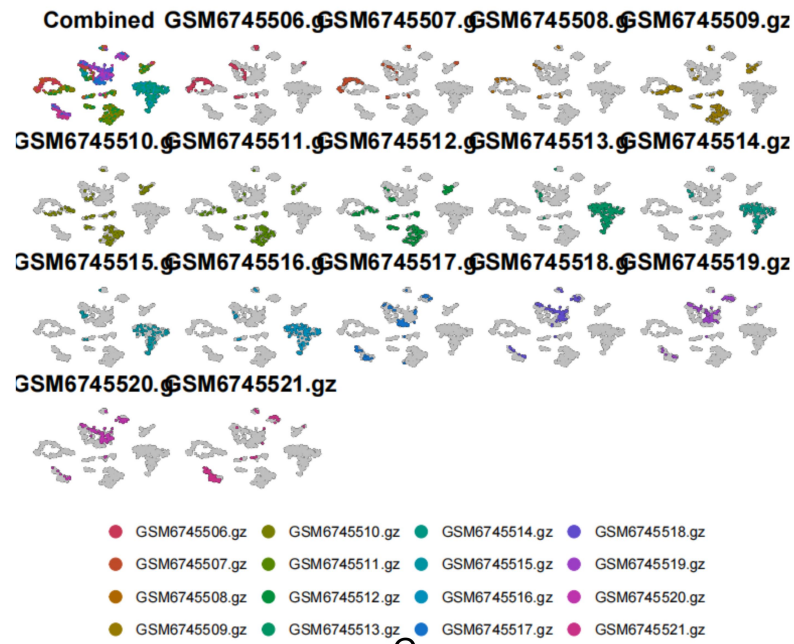
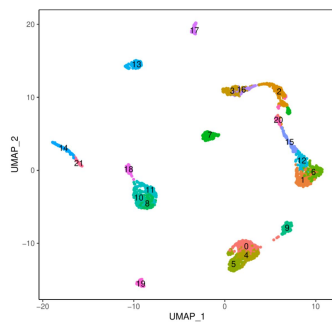


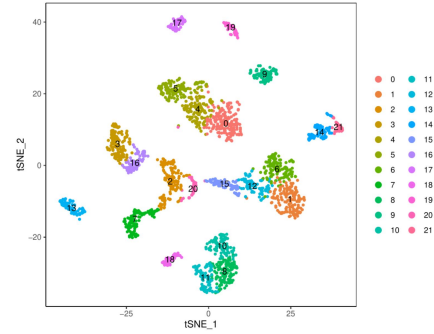
A



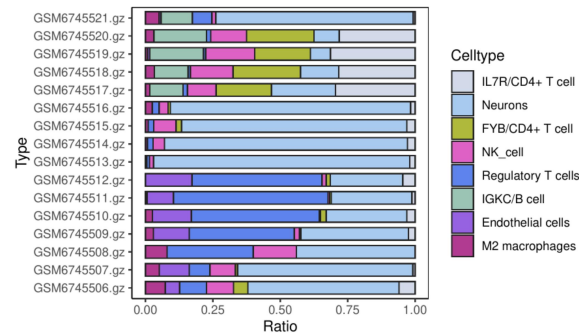
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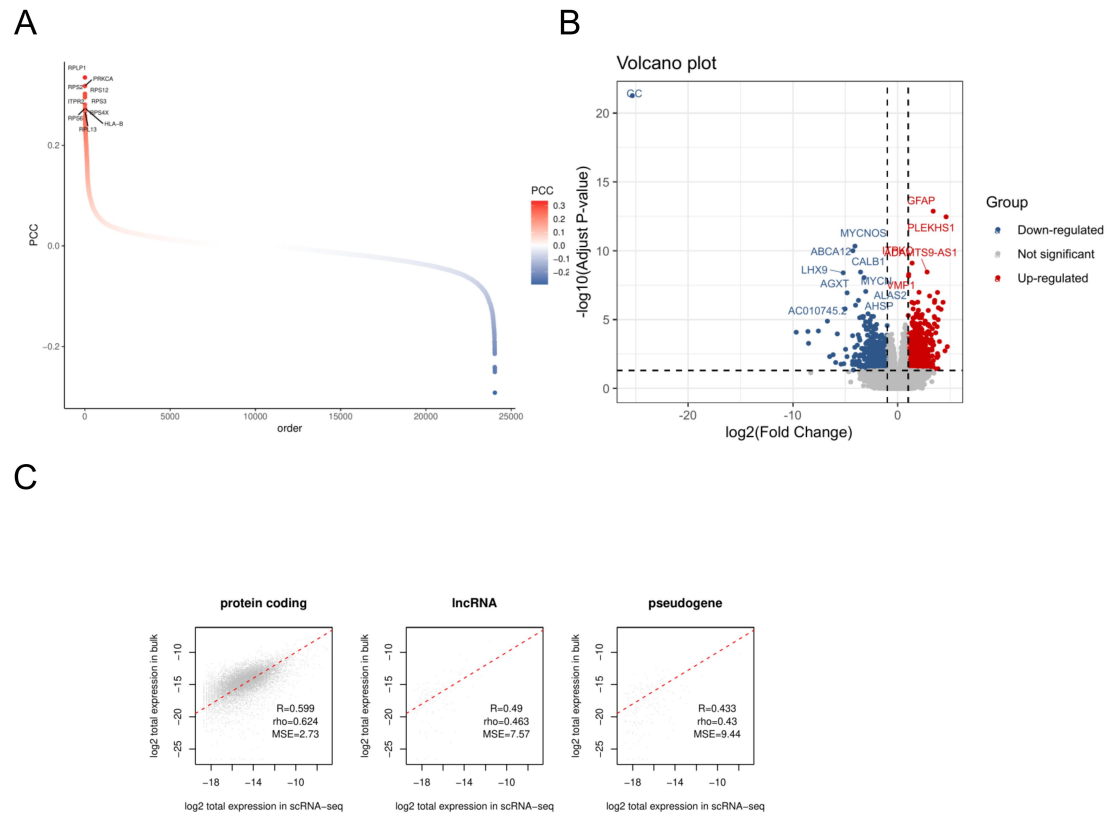
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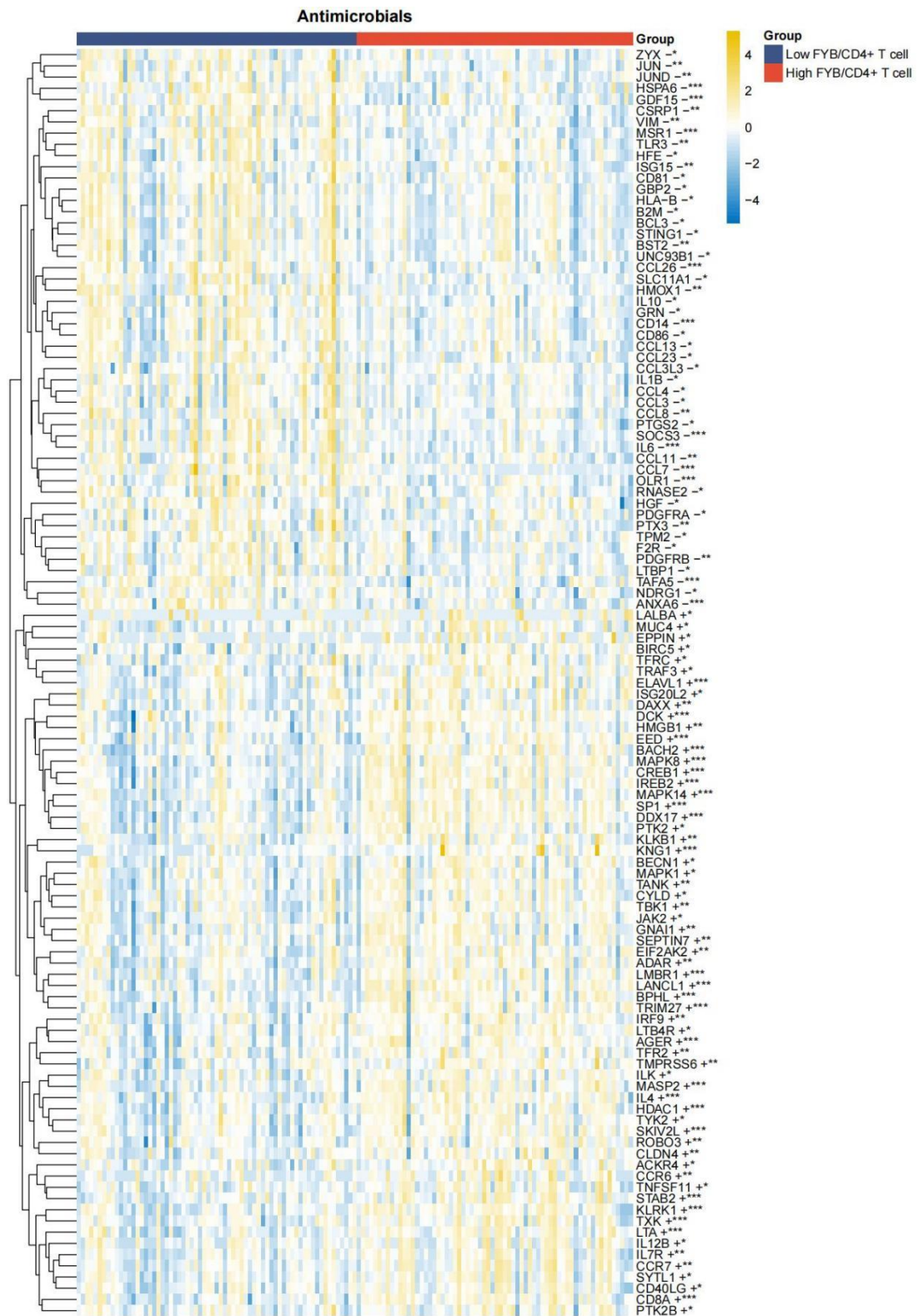
D



S1 Filtering and Annotation of scRNA-Seq Data. **A:**PCA showed a clear separation of cells in NB; **B-C:**The core cells were classified into 21 independent cell clusters using the Uniform Manifold Approximation and Projection (UMAP) (B) and t-distributed Stochastic Neighbor Embedding (t-SNE) algorithm (C); **D:**The percentage of each cell in each sample

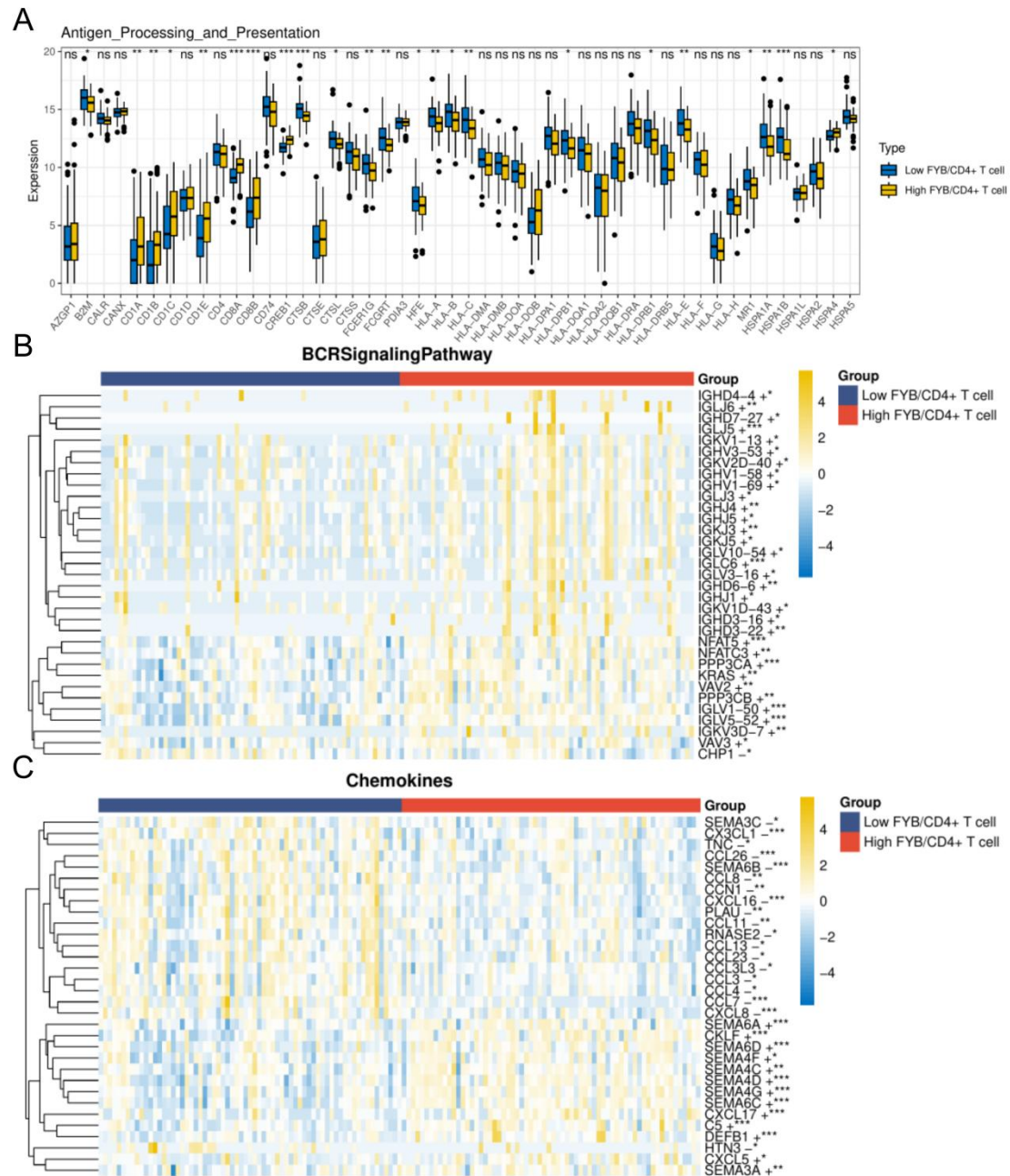


S2.scPagwas analysis and Bayesian inverse convolution analysis.**A:**Trait-related genes in neuroblastoma;**B:**Differentially expressed genes from RNA-Seq data;**C:**Bayesian inverse convolution analysis



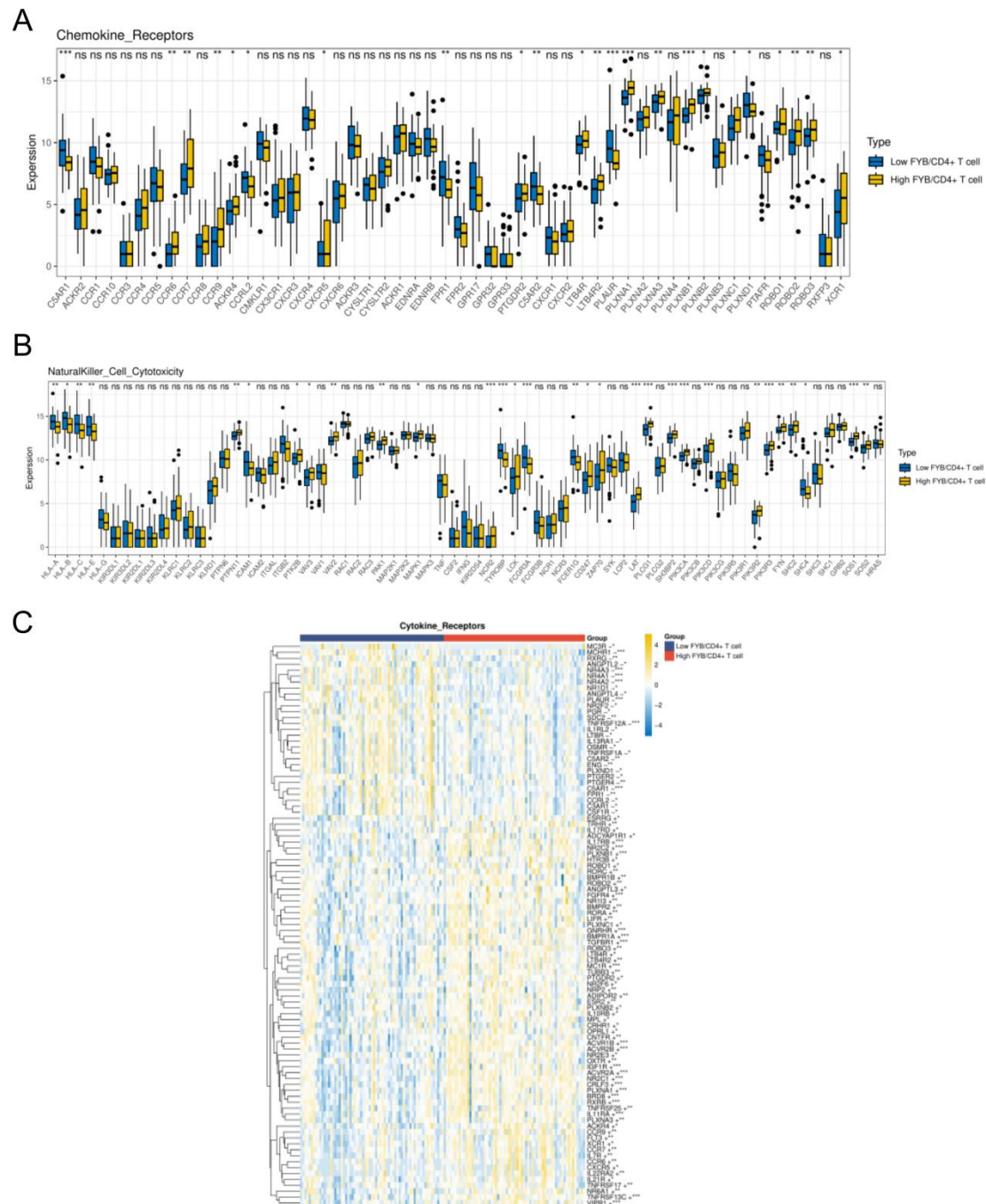
S3. FYB/CD4+ T cell with Antimicrobials gene set

*P<0.05; **P<0.01;***P<0.001



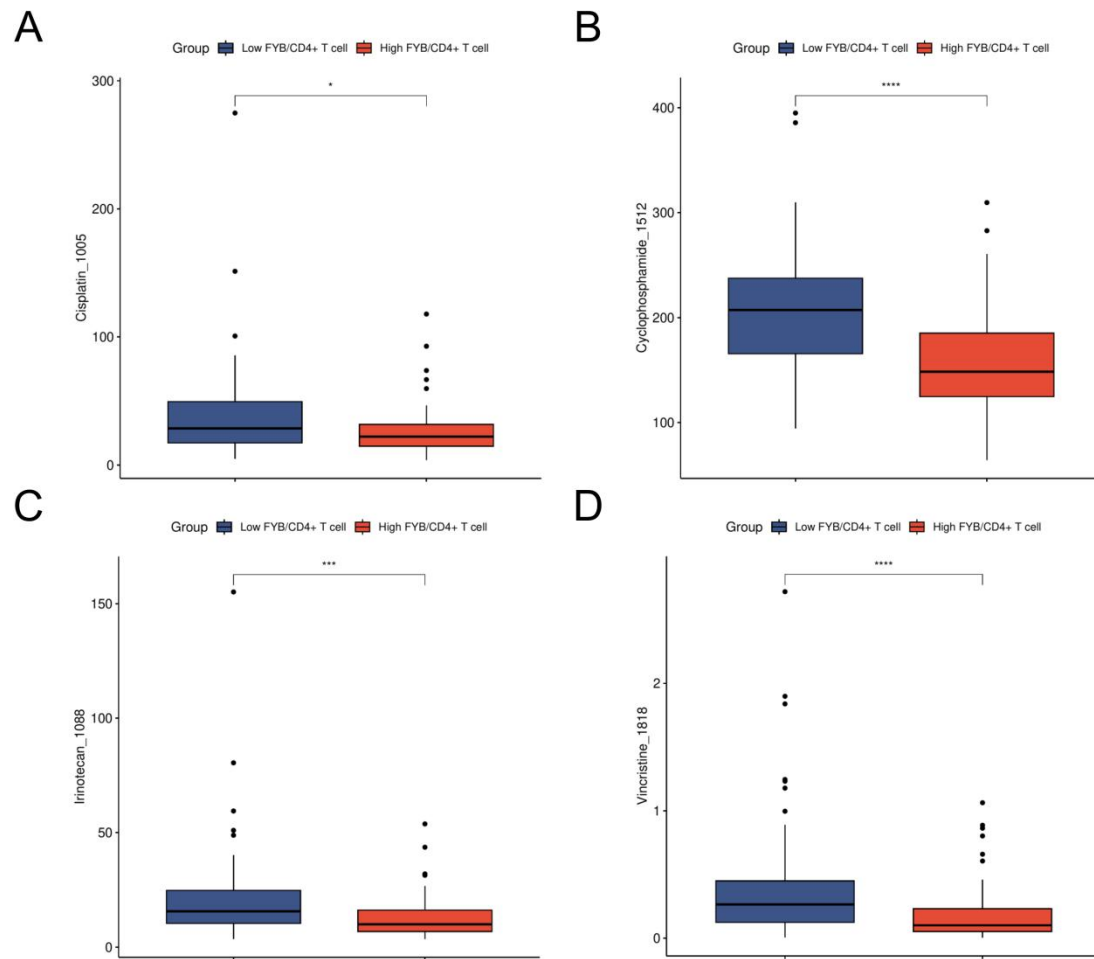
S4.FYB/CD4+ T cell and other immune gene sets(1) **A**:FYB/CD4+ T cell with Antigen Processing and Presentation gene set;**B**:FYB/CD4+ T cell with BCRSignalingPathway gene set;**C**:FYB/CD4+ T cell with Chemokines gene set

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$



S5. FYB/CD4⁺ T cell with Chemokines gene set(2) **A:**FYB/CD4⁺ T cell with Chemokine Receptors gene set;**B:**FYB/CD4⁺ T cell and NaturalKiller Cell Cytotoxicity gene set;**C:**FYB/CD4⁺ T cell with Cytokine Receptors gene set.

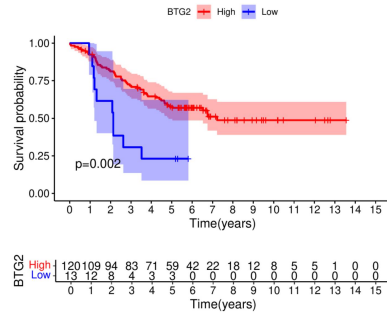
*P<0.05; **P<0.01;***P<0.001



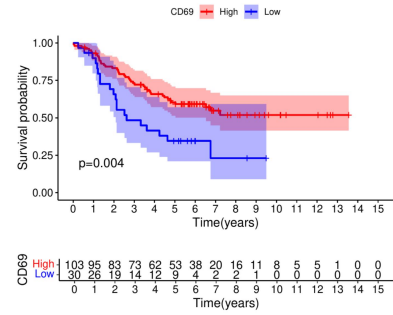
S6. Drug sensitivity analysis. **A:**Drug sensitivity analysis of Cisplatin;**B:**Drug susceptibility analysis of Cyclophosphamide;**C:**Drug susceptibility analysis of Irinotecan;**D:**Drug susceptibility analysis of Vincristine.

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$; **** $P < 0.0001$

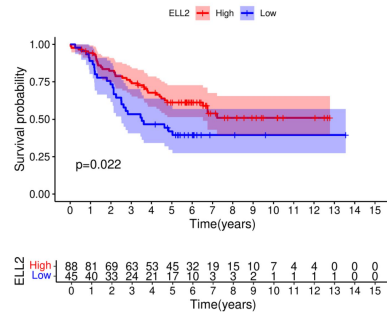
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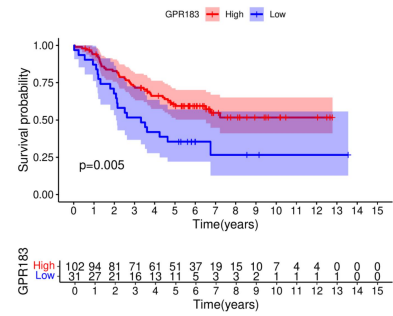
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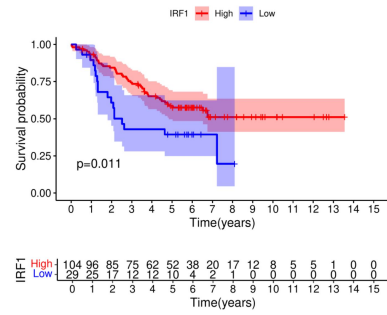
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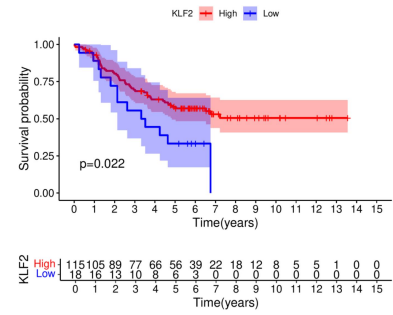
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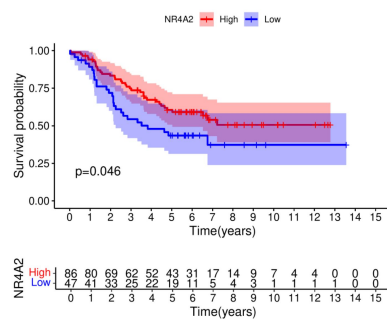
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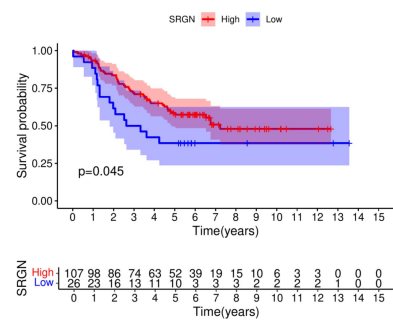
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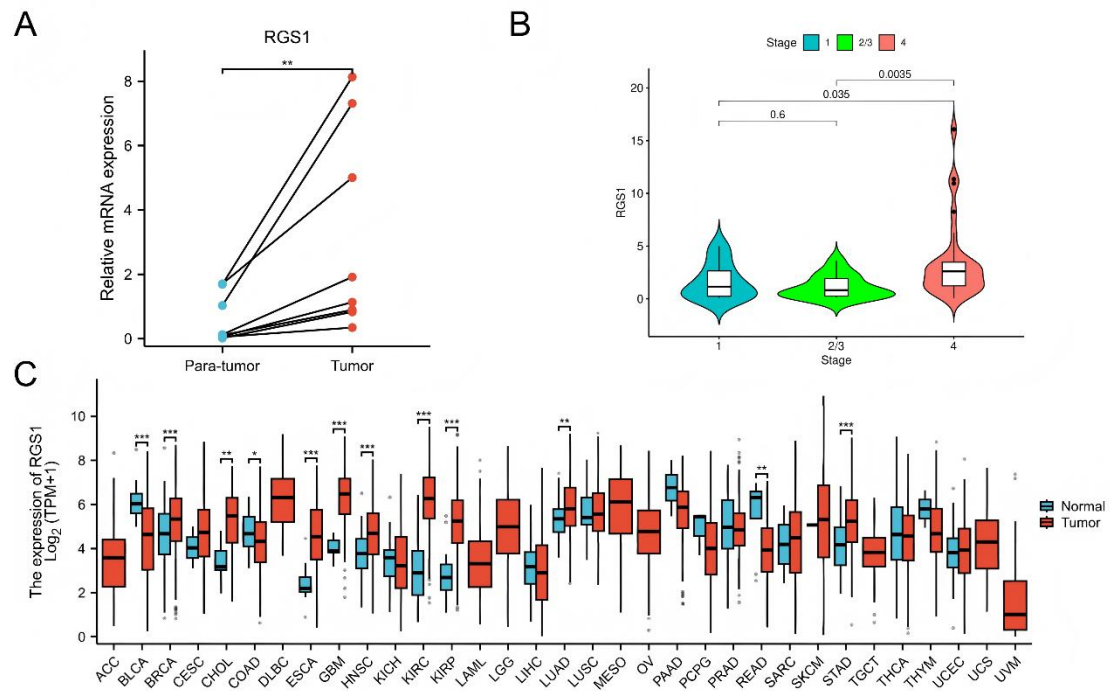
G



H



S7.K-M curve of the Hub gene. **A**:K-M curve of BTG2; **B**:K-M curve of CD69; **C**:K-M curve of ELL2; **D**:K-M curve of GPR183; **E**:K-M curve of IRF1; **F**:K-M curve of KLF2; **G**:K-M curve of NR4A2; **H**:K-M curve of SRGN.



S8.RGS1 expression in tumors. A: The relative expression level of RGS1 in the paired samples of 8 cases showed differences; B: Gene expression and tumor staging; C: Pan-cancer analysis of RGS1.

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$; **** $P < 0.0001$

Supplementary Table1

Primer Sequences (5' to 3')

GAPDH-F GTCTCCTCTGACTTCAACAGCG

GAPDH-R ACCACCCTGTTGCTGTAGCCAA

RGS1-F TCTTCTCTGCTAACCCTAAAGGA

RGS1-R TGCTTTACAGGGCAAAAGATCAG