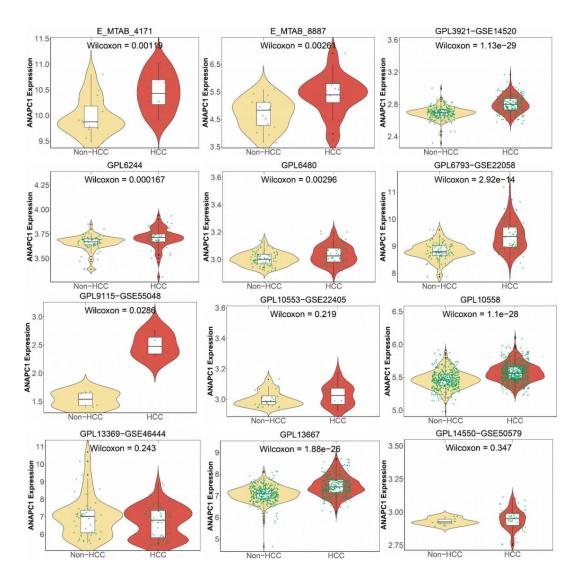
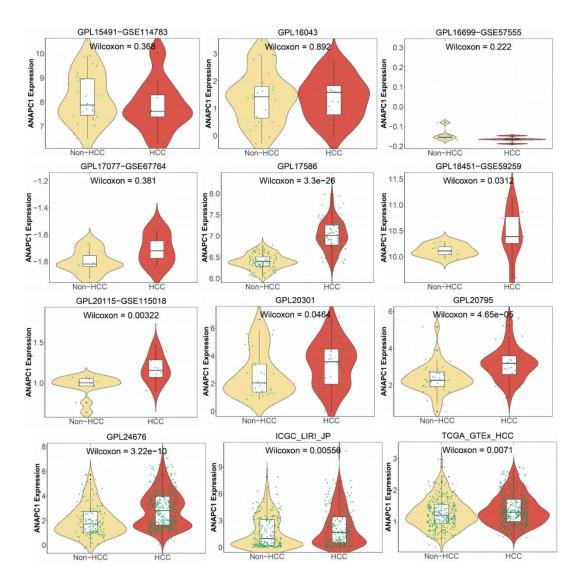


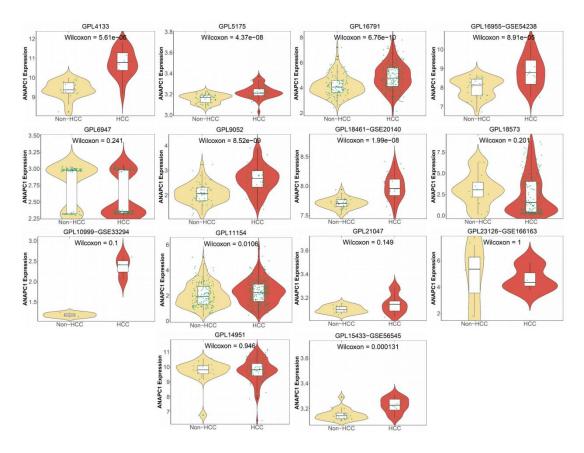
Supplementary Figure 1 Flowchart of inclusion and exclusion of bulk RNA datasets in this study.



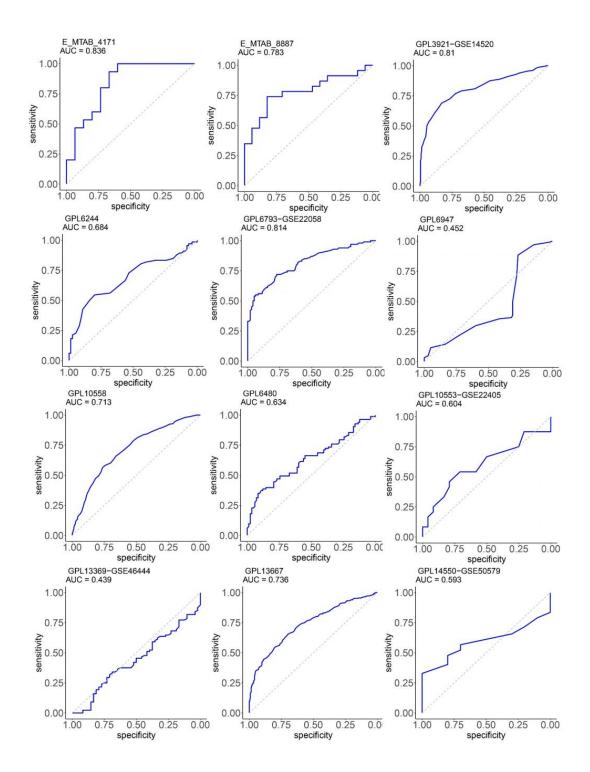
Supplementary Figure 2 Differences in ANAPC1 mRNA expression between HCC and non-HCC tissues across 12 platforms.



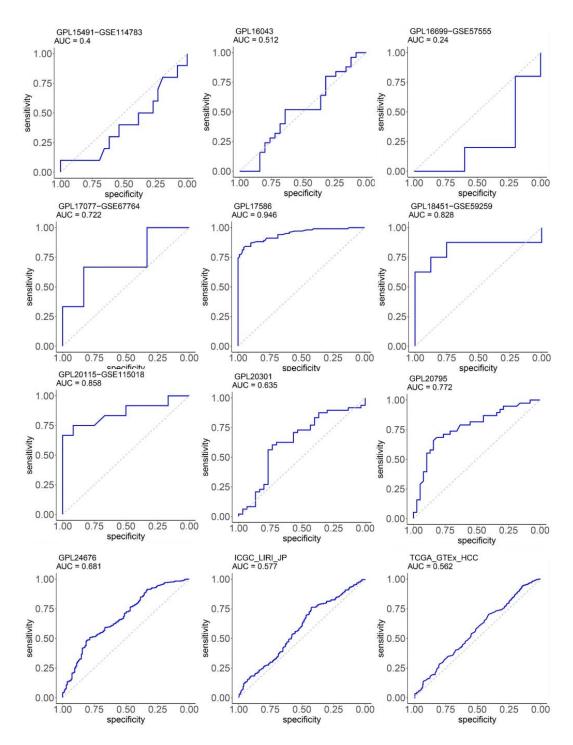
Supplementary Figure 3 Differences in ANAPC1 mRNA expression between HCC and non-HCC tissues across 12 platforms.



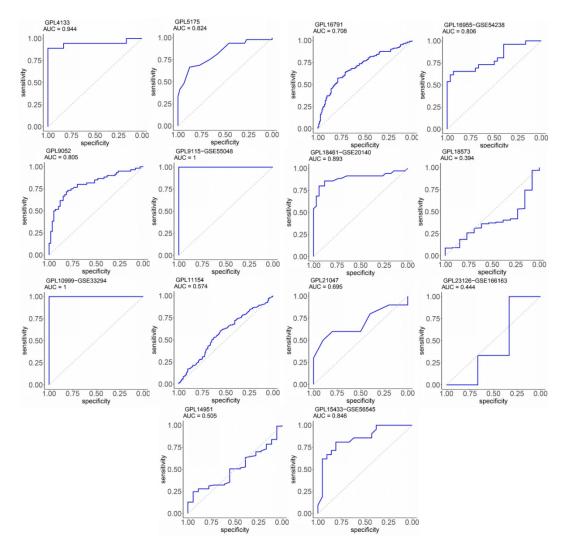
Supplementary Figure 4 Differences in ANAPC1 mRNA expression between HCC and non-HCC tissues across 14 platforms.



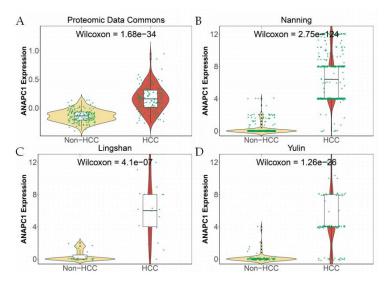
Supplementary Figure 5 ROC curves presentation of data from 12 platforms. (Among the 12 platforms, the closer the AUC is to 1, the more pronounced the difference in ANAPC1 mRNA expression between non-HCC and HCC tissues).



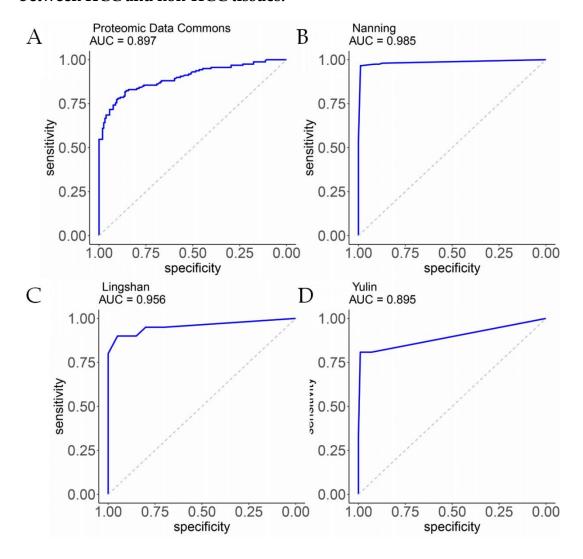
Supplementary Figure 6 ROC curves presentation of data from 12 platforms. (Among the 12 platforms, the closer the AUC is to 1, the more pronounced the difference in ANAPC1 mRNA expression between non-HCC and HCC tissues.)



Supplementary Figure 7 ROC curves presentation of data from 14 platforms. (Among the 14 platforms, the closer the AUC is to 1, the more pronounced the difference in ANAPC1 mRNA expression between non-HCC and HCC tissues.)

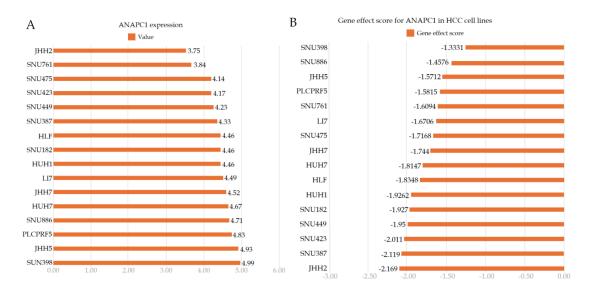


Supplementary Figure 8 Expression differences of ANAPC1 protein between HCC and non-HCC tissues.

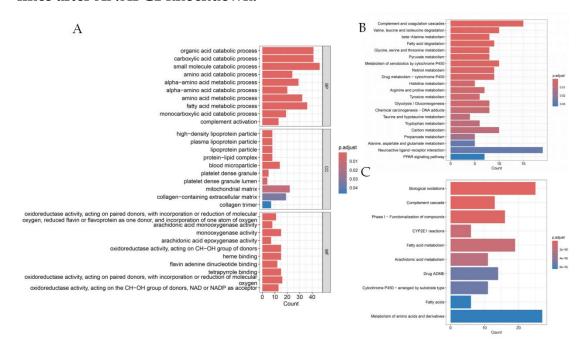


Supplementary Figure 9 ROC curves of ANAPC1 protein expression. (In the four protein expression data, the closer the AUC is to 1, the more

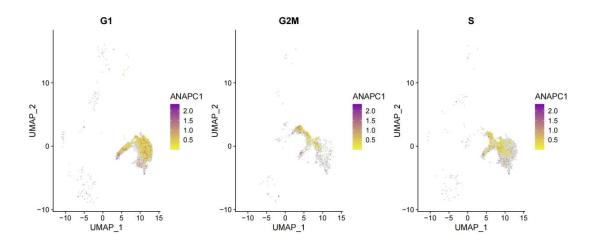
pronounced the difference in ANAPC1 protein expression between non-HCC and HCC tissues.)



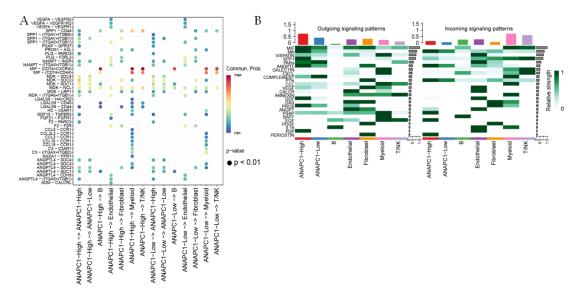
Supplementary Figure 10 The effect of ANAPC1 expression on cell lines. A. Expression of ANAPC1 in HCC cell lines; B. Functional impact score of cell lines after ANAPC1 knockdown.



Supplementary Figure 11 Enrichment analysis of ANAPC1 negatively correlated genes in low-expression state. A. GO; B. KEGG; C. Reactome.



Supplementary Figure 12 Cell cycle analysis of ANAPC1 under scRNA-seq. (Purple represents high expression and yellow represents low expression. More purple means higher expression, and more yellow means lower expression)



Supplementary Figure 13 Comparison of Ligand-Receptor Interactions in cellular communication. A. Ligand-receptor pairs interaction in cellular communication; B. Contribution of inbound and outbound signal transduction in different cell clusters.