

**Supplementary figure 1** Single-gene GSEA analysis of these three selected genes.

A-C: Single-gene GSEA analysis of CDKN2A

D-F: Single-gene GSEA analysis of GPX3

G-I: Single-gene GSEA analysis of SLC7A11

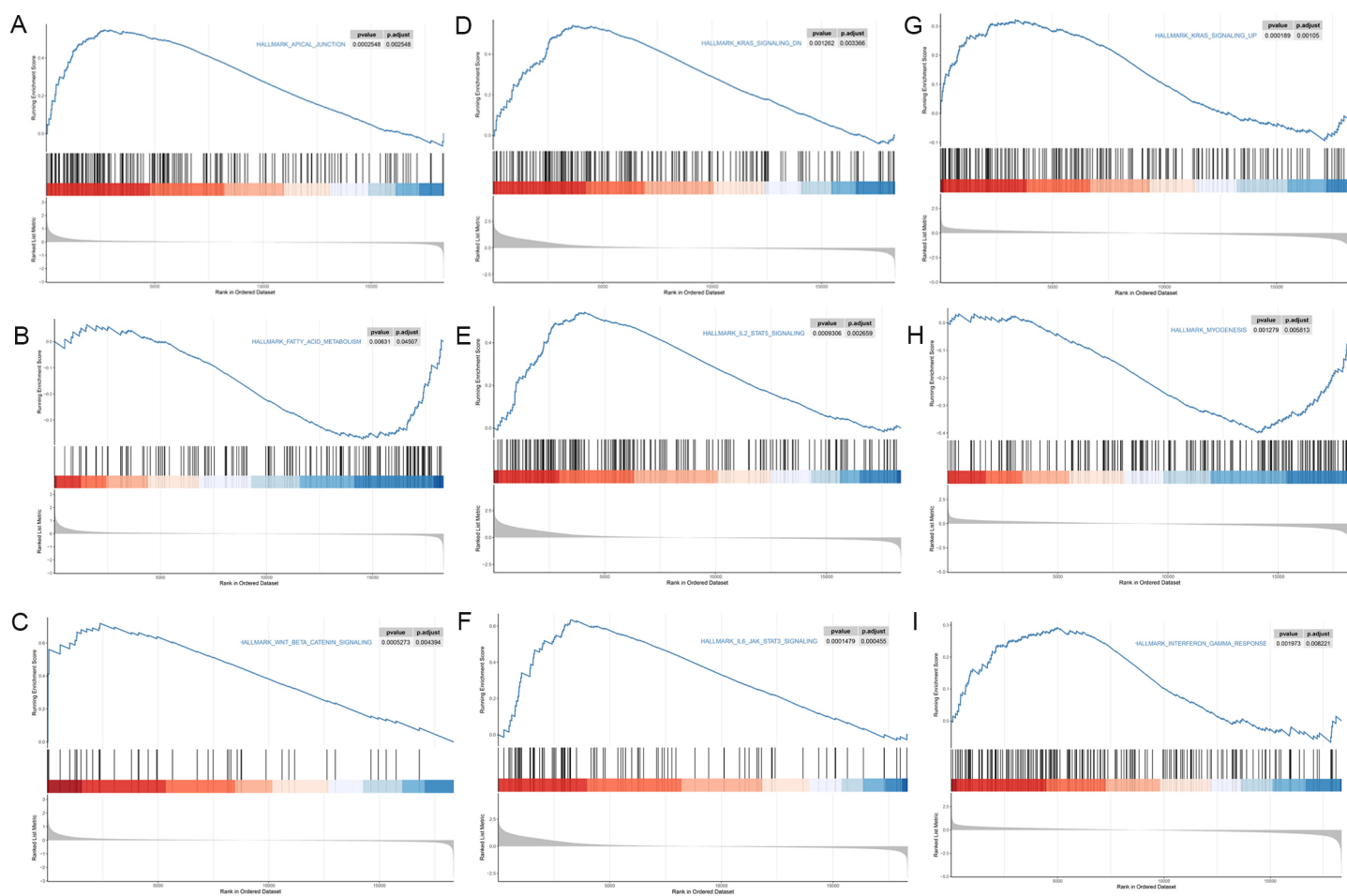
**Supplementary figure 2.** Heat map of original DNA methylation measurements at CpG sites in three genes and miRNA-mRNA-TFs interaction networks of the three selected ferroptosis-related genes.

A-C: The heat map of DNA methylation at CpG sites in the CDKN2A, GPX3 and SLC7A11 gene by the MethSurv database.

D-F: Promoter methylation level of CDKN2A, GPX3 and SLC7A11 in normal tissues and primary CRC tissues analyzed by the UALCAN database.

G: TFs-mRNA-miRNA networks of the ferroptosis genes (28TFs、 3 mRNAs and 3 miRNAs were included).

# Supplementary figure 1



# Supplementary figure 2

