

Fig S1. Comparison of B7-H3 expression between tumor-naïve brain tissue and glioma in CGGA microarray dataset (a) and GSE16011 microarray dataset (b).

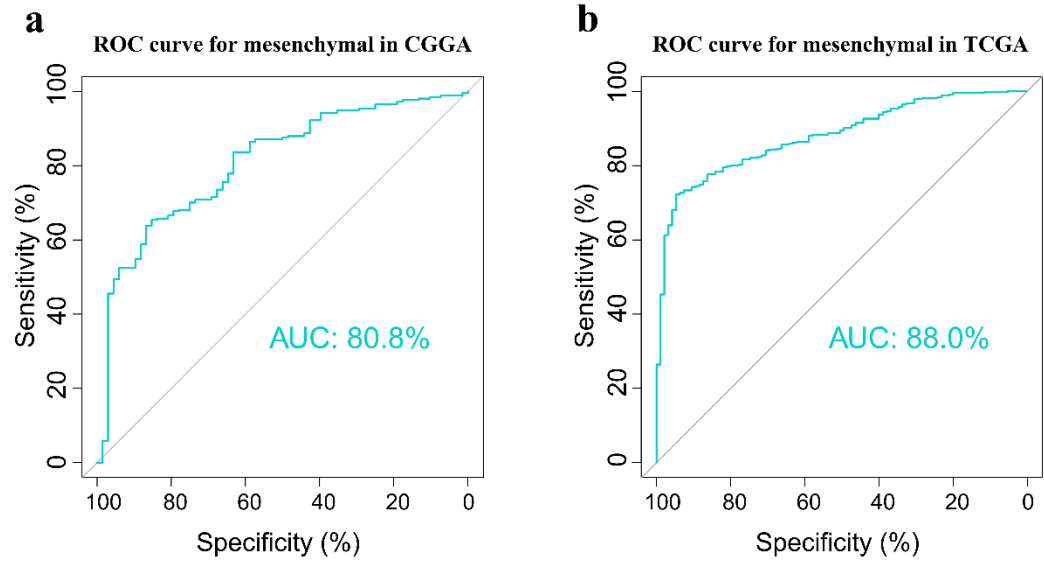


Fig S2. ROC curves for predicting mesenchymal subtype in CGGA (a) and TCGA (b) dataset.

## B7-H3 Expression in CGGA microarray dataset

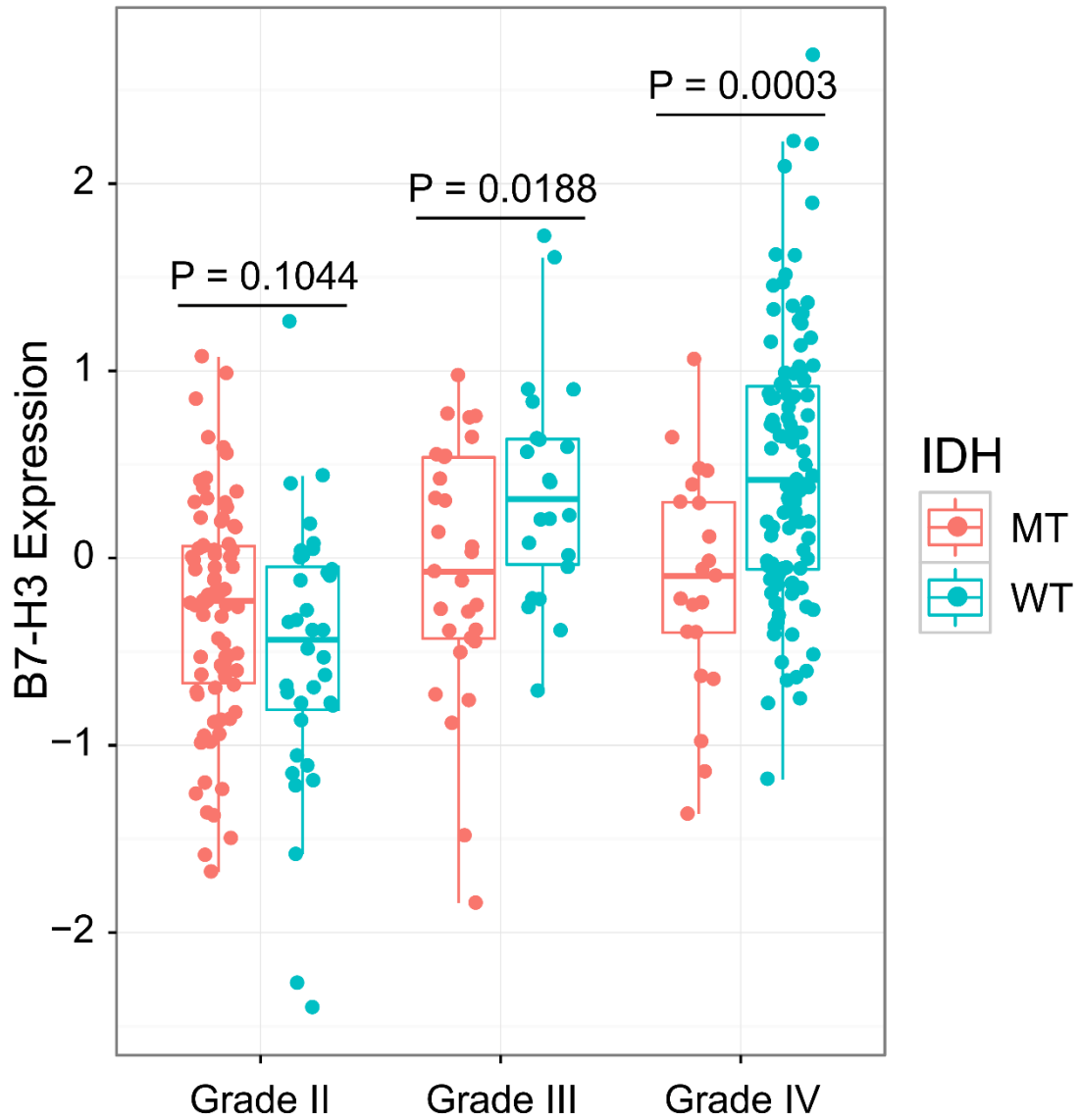
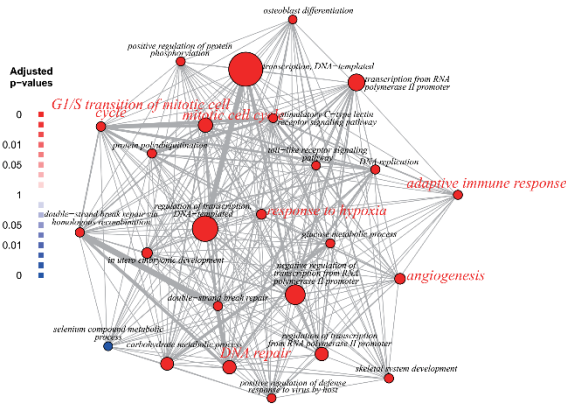
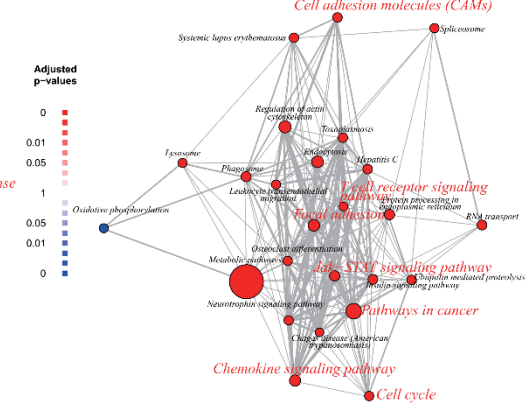


Fig S3. Relationship between B7-H3 expression and IDH mutation in CGGA Agilent microarray dataset. Red dots and cyan dots indicate IDH mutant and wild-type samples, respectively. Student's t-test was used to check the statistical difference between binary samples.

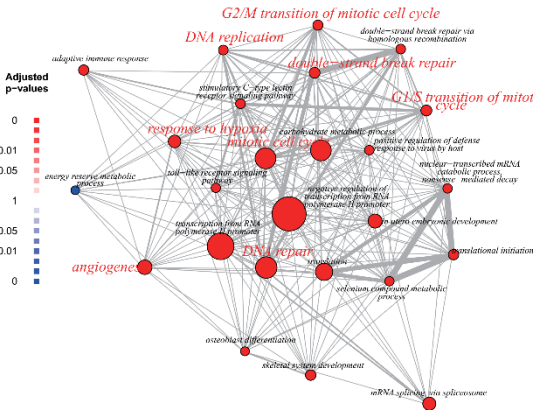
**a** Enrichment Map of GSEA on “GO\_BP” in CGGA GBM



**b** Enrichment Map of GSEA on “PW\_KEGG” in CGGA GBM



**c** Enrichment Map of GSEA on “GO\_BP” in TCGA GBM



**d** Enrichment Map of GSEA on “PW\_KEGG” in TCGA GBM

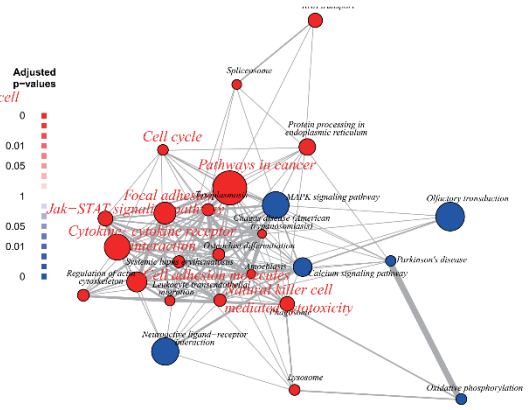


Fig S4. B7-H3 related biological processes (a, c) and pathways (b, d) in GBM. In the enrichment map for GSEA, nodes are colored by the sign of the enrichment scores (red: +, blue: -). The sizes of nodes are in proportion to the sizes of gene sets, while the width of edges is proportionate to Jaccard coefficients.

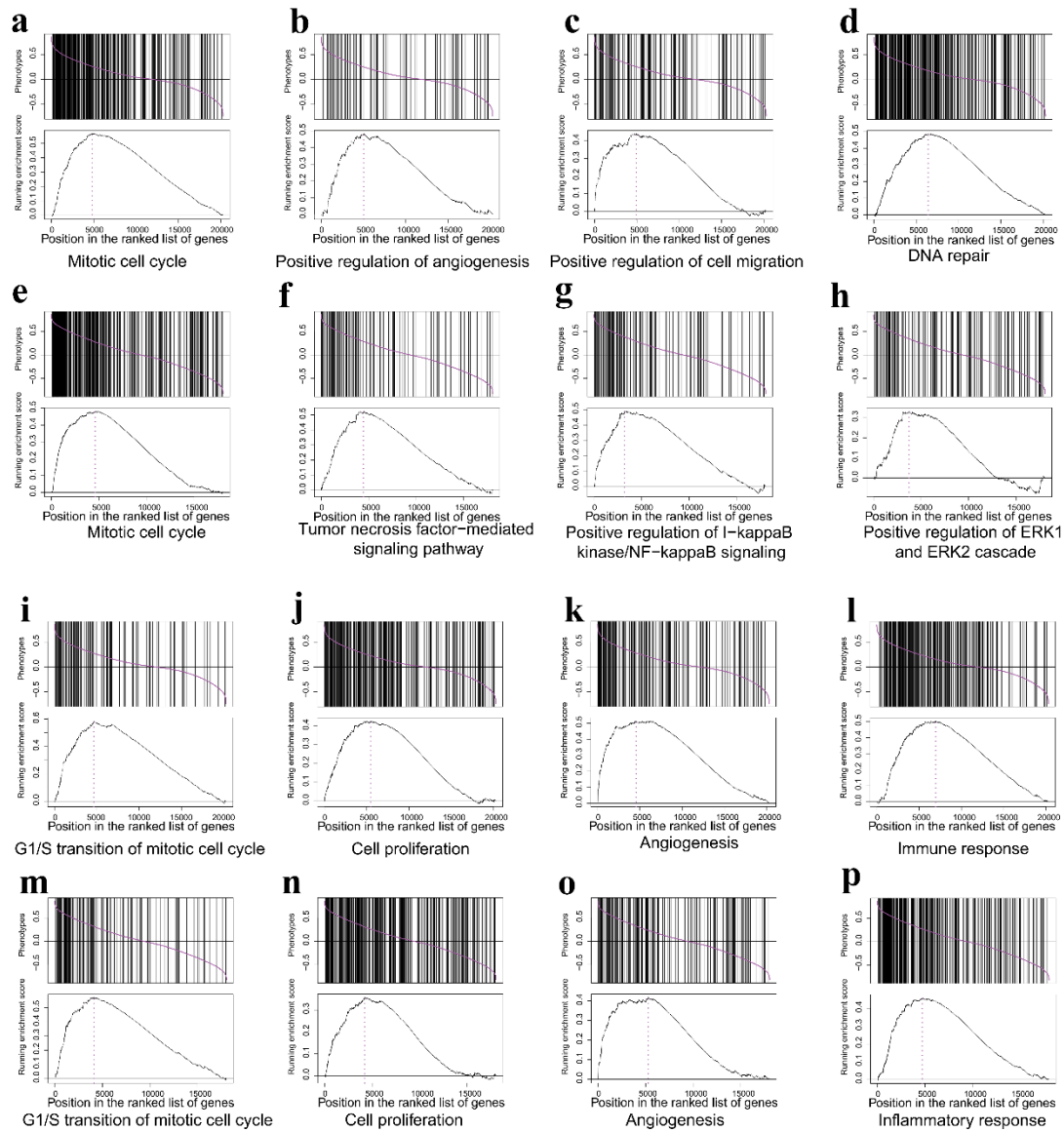


Fig S5. Concerted B7-H3 related biological processes and pathways in whole grade glioma of CGGA (a-d) and TCGA dataset (e-h).

Top 25 B7-H3 most related biological processes and pathways in GBM of CGGA (i-l) and TCGA dataset (m-p).