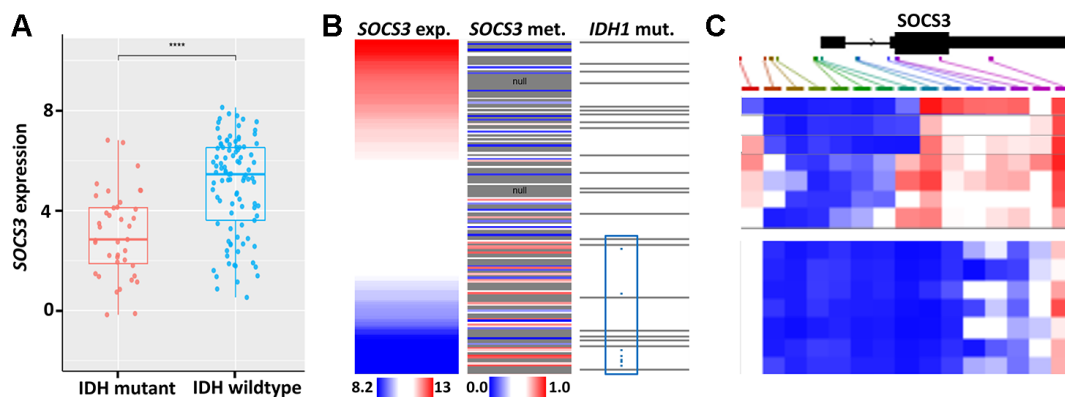
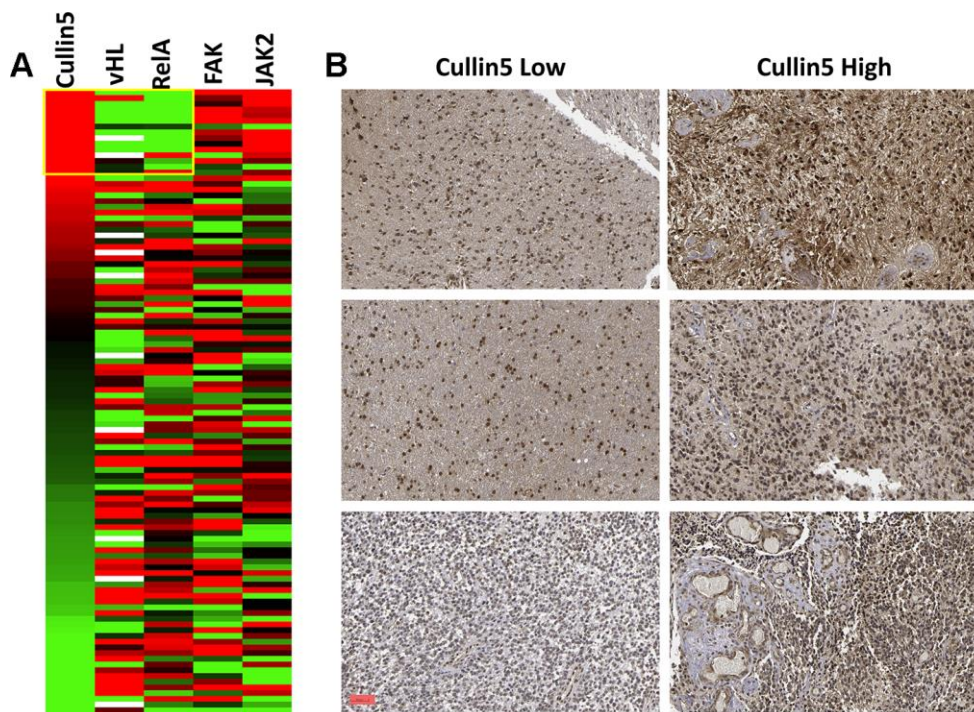


SUPPLEMENTARY FIGURES



Supplementary Figure 1. *SOCS3* expression and *IDH1* mutations in GBM. (A) Boxplot analysis of *SOCS3* expression in *IDH* mutant and wildtype glioma samples was based on CGGA dataset (mRNAseq_325). (B) Heatmap analysis of *SOCS3* gene expression and methylation, and *IDH1* mutation status was based on UCSC Xena based on TCGA-GBM dataset. The blue box encompasses all the patient's samples ($n=7$) that carry mutated *IDH1* with *SOCS3* expression data available ($n=166$). (C) 7 out of 16 *IDH1* mutant patients have *SOCS3* methylation data available (top panel). *SOCS3* methylation status of 7 random GBM patients with unknown *SOCS3* expressions (bottom panel). Gray area indicates *SOCS3* methylation data is not available for that specific patient's sample.



Supplementary Figure 2. Proteomic and immunohistochemistry (IHC) study of cullin5 (A) The protein quantification data was derived from CPTAC-GBM dataset ($n=99$). GBM cases were aligned with decreasing cullin5 protein levels. Corresponding protein levels of vHL, RelA, FAK and JAK2 of those aligned cases were color coded. (B) Representative cullin5 immunostaining slides derived from 6 HGG patients. Magnification scale: 50 μ m. Image credit: Human Protein Atlas. Images available from v19.proteinatlas.org.