Figure S1

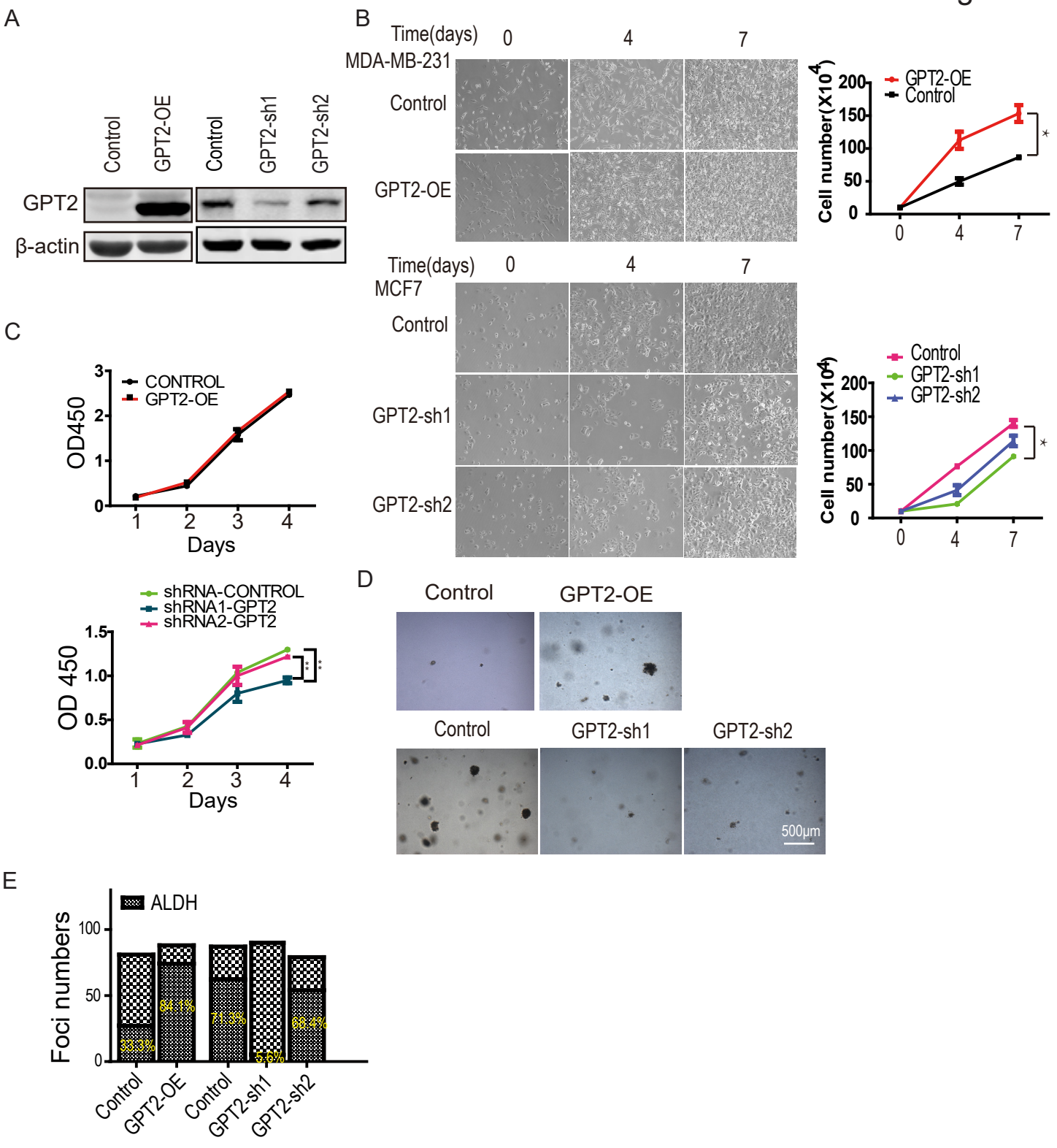

Figure Legend

Figures S1 GPT2 induced stemness and promoted tumorigenesis of breast cancer cells.

A. The efficiency of overexpression or knocking down of GPT2 in breast cancer MDA-MB-231 or MCF7 cells, respectively.

B. & C. The effects of GPT2 on cell growth and cell vialbility. B. cell counting; C. CCK8 assay.

D. GPT2 promotes tumorigenesis of breast cancer cells *in vitro*. (Objective len was 5X)

E. Quantification of ALDH$^+$ cells in breast cancer cells overexpressing GPT2 or depleted of GPT2. The small shading bar and the big bars in each column represent the ALDH$^+$ cell numbers and the total cell numbers per view, respectively. *, $P < 0.05$; **, $P < 0.01$.

Figure S2

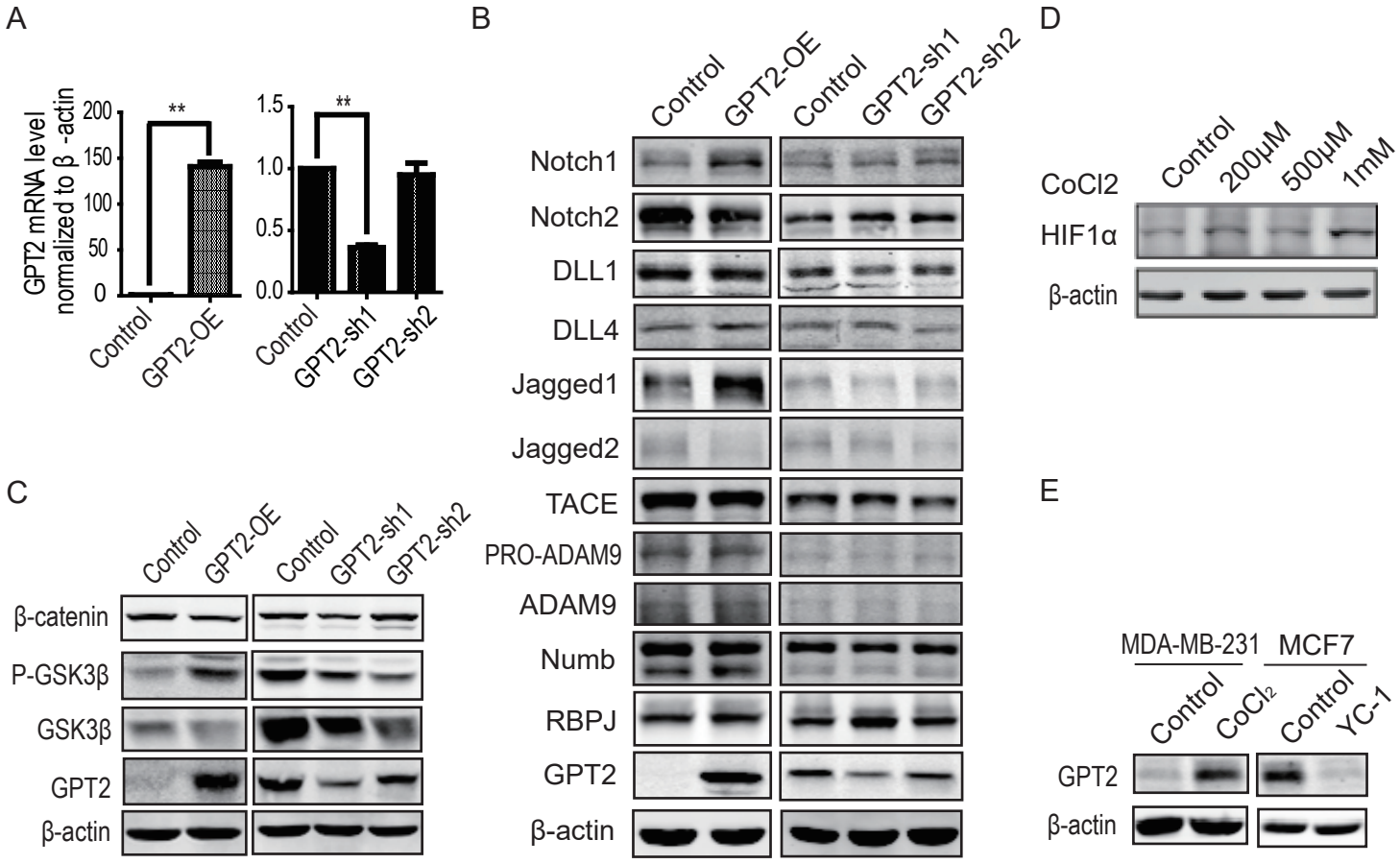

Figure legend

Figure S2 GPT2 did not activate Notch signaling pathway nor Wnt signaling pathway

A. GPT2 overexpression and knockdown efficiency verification by qPCR.

B. & C. GPT2 did not activate the Notch signaling pathway and the Wnt signaling pathway.

D. Dose response of MDA-MB231 to CoCl2.

E. Effects of HIF1α activator/inhibitor on GPT2 expression. The final concentration of YC-1 and CoCl2 was 5μM and 1mM, respectively.

Figure S3

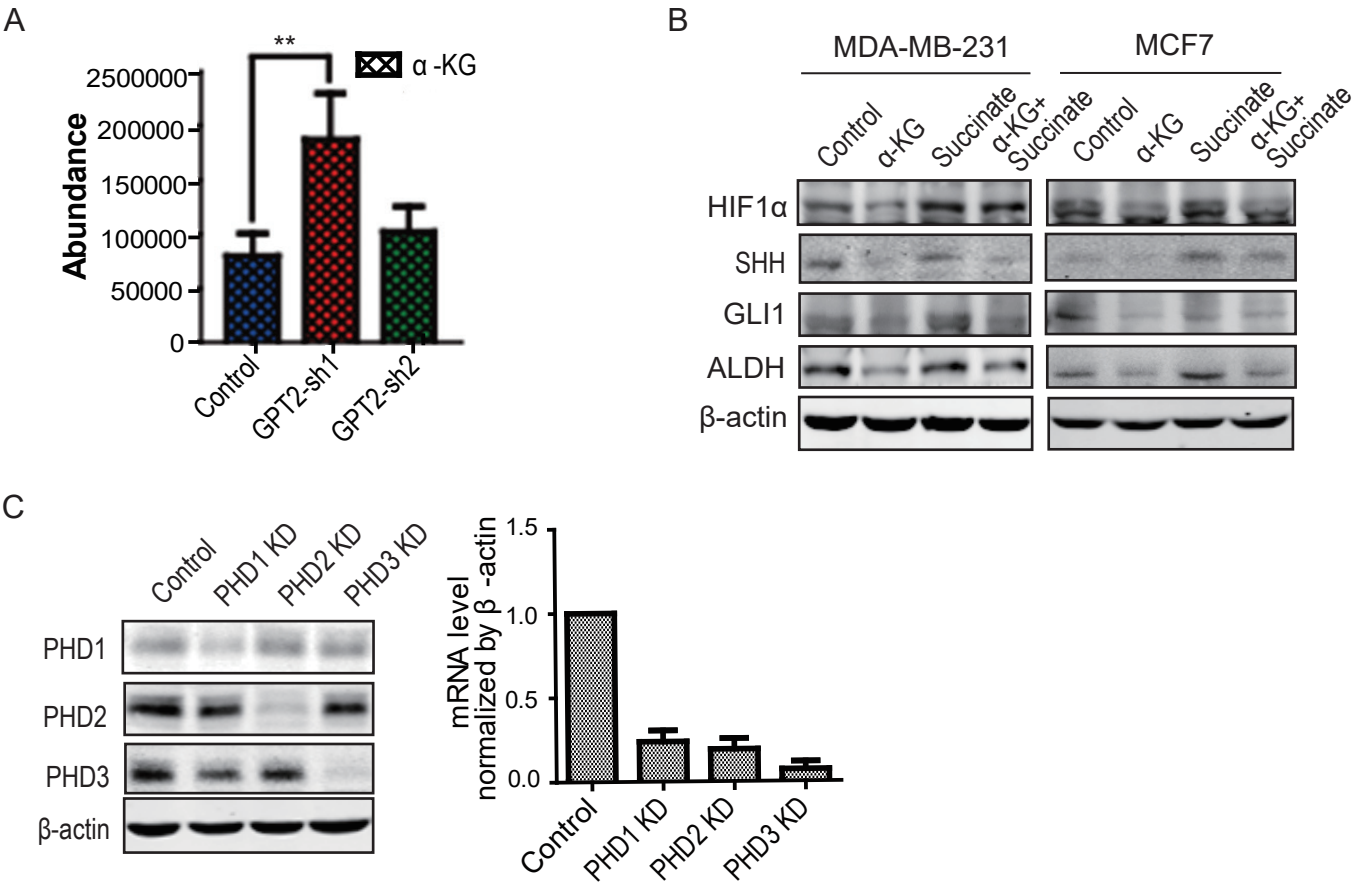

Figure legend

A. The effects of GPT2 knockdown on cellular α-KG content in MCF7 cells.

B. Effects of α-KG and succinate on the protein levels of HIF1a and stem cell markers. The final Concentration of α-KG and succinate 100μM and 200μM, respectively.

C. The efficiency of PHD1, PHD2 or PHD3 knockdown was analyzed in MDA-MB-231 cells by q-PCR and Western blot.