



**Supplementary Figure S4. Overexpression of USP10 increased cell growth of LNCaP and 22Rv1 cells.** Both 22Rv1 and LNCaP cells were transfected with USP10 for 48 h. (A) Western blot analysis was performed to detect the indicated proteins. IB: immunoblot. (B) Analysis of p53 and G3BP2 localization by USP10 overexpression in prostate cancer cells. Immunofluorescence analysis was performed in LNCaP and 22Rv1 cells overexpressing USP10. We stained cells with anti-G3BP2 (red) and anti-p53 antibodies (green). Bar = 10  $\mu$ m. (C) Repressive effect of USP10 overexpression on p53-downstreams. Expression levels of p53-target genes (*BAX*, *PUMA*, *NOXA*) were evaluated by qRT-PCR analysis (N=3). Data represent average + s.d. \*:  $P < 0.05$  (D) Cell growth was evaluated by cell counting. O/E: overexpression. Data represent average + s.d.