



**Supplementary Figure S1. USP10 is regulated by AR binding in VCaP cells.**

(A) AR-binding sites (ARBSs) in the intronic region of USP10 in VCaP cells. Our AR ChIP-seq analysis data (32) in VCaP cells was used to detect the ARBS in USP10 locus. VCaP cells were treated with vehicle or DHT 10 nM for 24 h. (B) Validation of AR binding by ChIP-qPCR. VCaP cells were treated with vehicle or DHT 10 nM for 24 h. ChIP was performed using anti-AR antibody or non-specific IgG. Enrichment of ARBS in USP10 and negative control locus (N.C) was measured by real-time PCR (N=3). Data represents the average + s.d. \*\*:  $P < 0.01$ . (C) Androgen-dependent induction of USP10 in VCaP cells. Cells were treated with vehicle or DHT 10 nM for the indicated times. qRT-PCR analysis (N=3) was performed to measure the expression level of USP10 in DHT-treated cells relative to vehicle. Data represents the average + s.d. \*:  $P < 0.05$ . (D) Induction of USP10 at protein level by androgen in VCaP cells. Cells were treated with DHT 10 nM or vehicle for 24 and 48 h.  $\beta$ -actin is a loading control. IB: immunoblot.