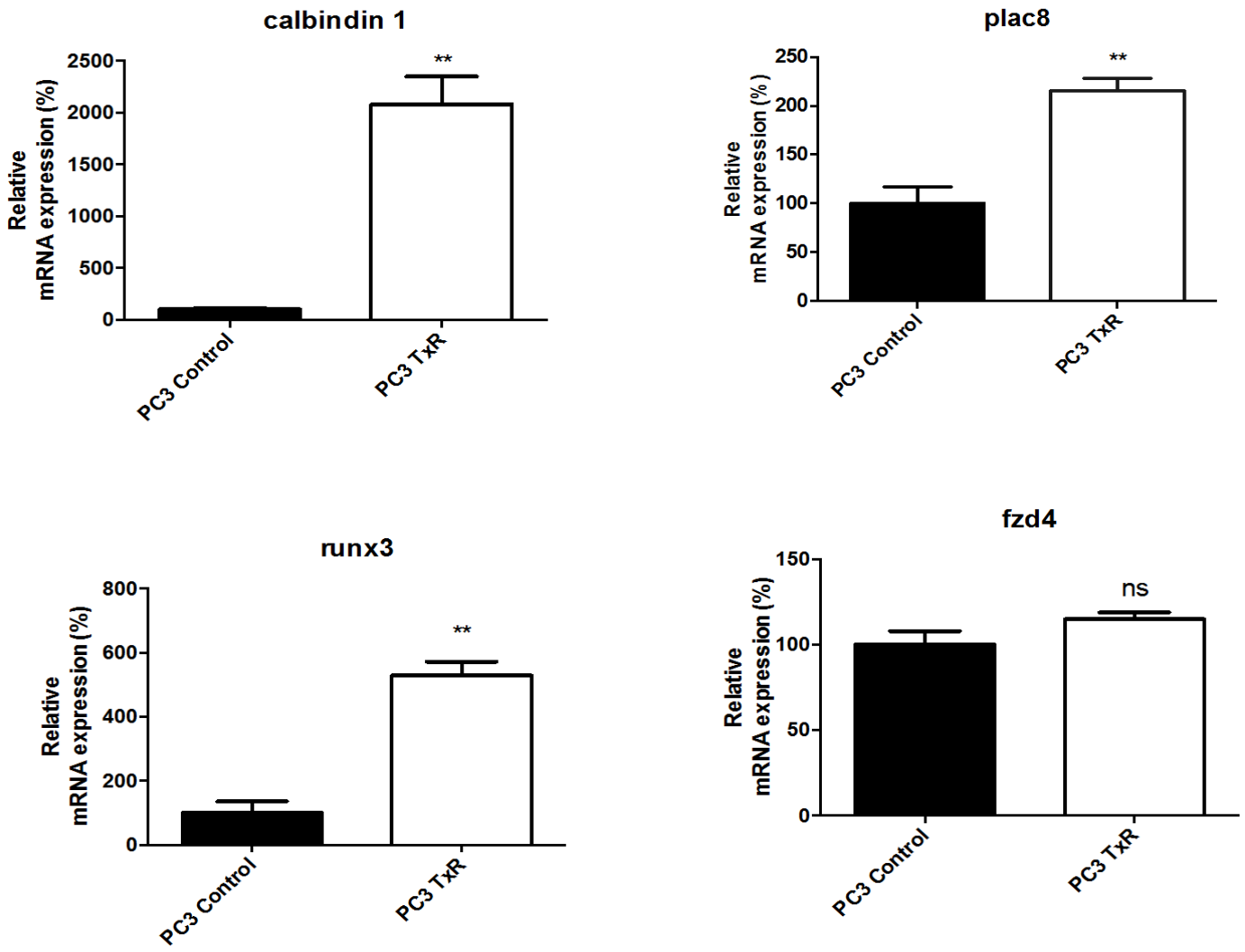
Supplemental Figure Legends

Supplemental Figure 1. Validation of gene for chemoresistance of prostate cancer to DTX. Total RNA from PC-3 parental and PC-3-TxR cells was subjected to real-time PCR for calbindin1,plac8, runx3 and fzd4. The expression of these genes are inconsistent with the results from gene array data. (n = 3 per group); **,P<0.001 versus PC-3 parental cells by t test, ns, no significant P<0.05.

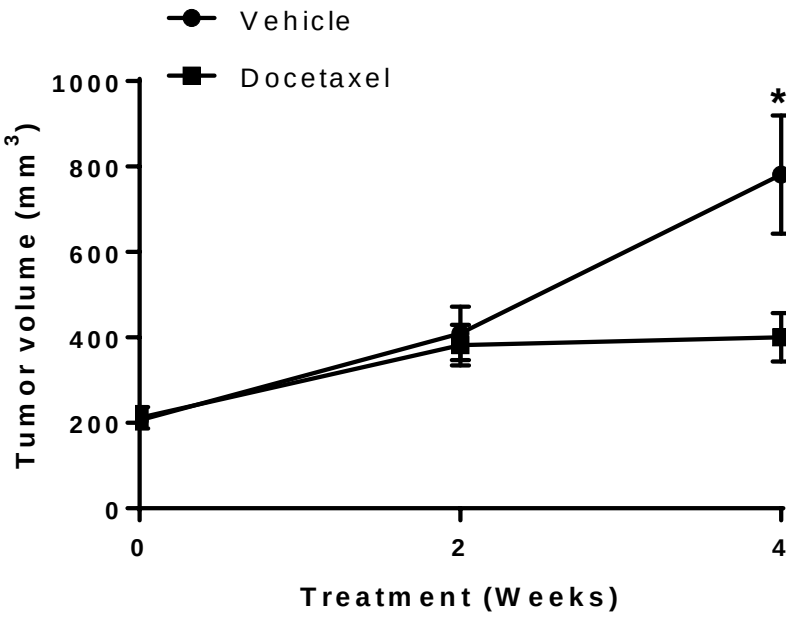
Supplemental Figure 2. Caliper measurements of subcutaneous tumors presented in Figure 5A.

Supplemental Figure 3. Bone stromal cells decrease LXN expression and induce chemoresistance in LNCaP cells. LNCaP cells (1.5×10^4/ml) were mixed with LNCaP (1.5×10^4/ml), MC3T3 (1.5×10^4/ml) or ST-2 (1×10^4/ml). (A) The cell mixtures were plated into 6-well plates. After 48 hours, cells were then collected and total mRNA subjected to real-time PCR for LXN and HPRT-1 using human-specific primers. LXN expression was normalized to HPRT-1. *P=<0.05 LNCaP+MC3T3 cells versus LNCaP (t test). #P<0.01 LNCaP+ST-2 cells versus LNCaP cells (t test). (B) The cell mixtures were plated into 96-well plates. After 48 hours, the cells were treated with 16nM docetaxel (DOX) for 48 hours and then subjected to MTS assay. *P<0.05 LNCaP+MC3T3 cells versus LNCaP cells (t test).

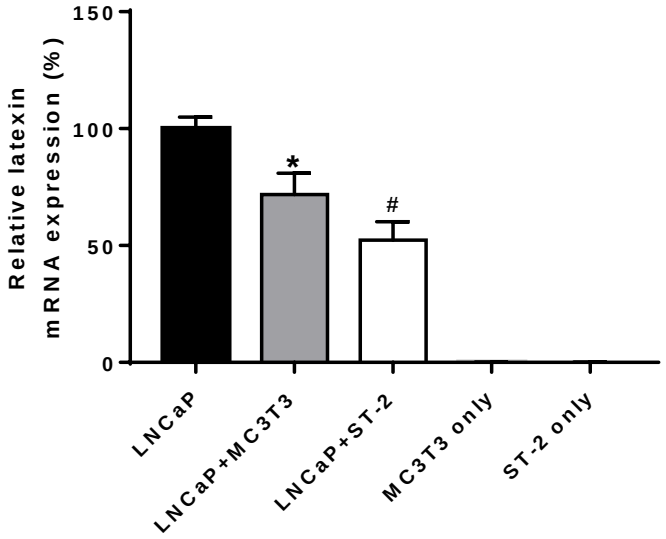
Supplemental Figure 4. RAW cells do not reduce LXN expression or promote chemoresistance in PC-3 cells. PC-3-luc cells (1.5×10^4/ml) were mixed with PC-3 (1.5×10^4/ml), MC3T3 (1.5×10^4/ml) or RAW cells (1×10^4/ml) . **(A)** The cell mixtures were plated into 6-well plates. After 48 hours, cells were then collected and total mRNA subjected to real-time PCR for LXN and HPRT-1 using human-specific primers. LXN expression was normalized to HPRT-1. *P=0.0004 PC-3-luc+MC3T3 cells versus PC-3-luc+PC-3 cells (t test). $^{\#}$P=0.012 PC-3-luc+MC3T3 cells versus PC-3-luc+PC-3 cells (t test). **(B)** The cell mixtures were plated into white, clear bottom 96-well plates. After 48 hours, the cells were treated with 16nM docetaxel (DOX) for 48 hours and then 20µl luciferin (40 mg/ml) was added to each well and the cells were incubated at 37°C and 5% CO2 for 2 minutes. Cell viability was obtained by measuring the luminescence at integration 1000 ms with a plate reader. *P=0.022 PC-3-luc+MC3T3 cells versus PC-3-luc+PC-3 cells (t test).

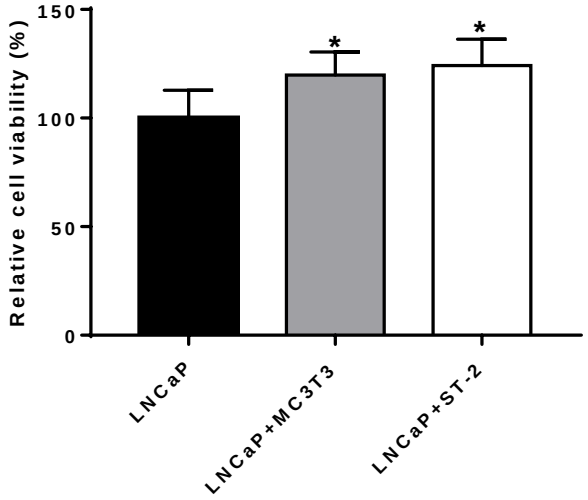


Supplemental Figure 1

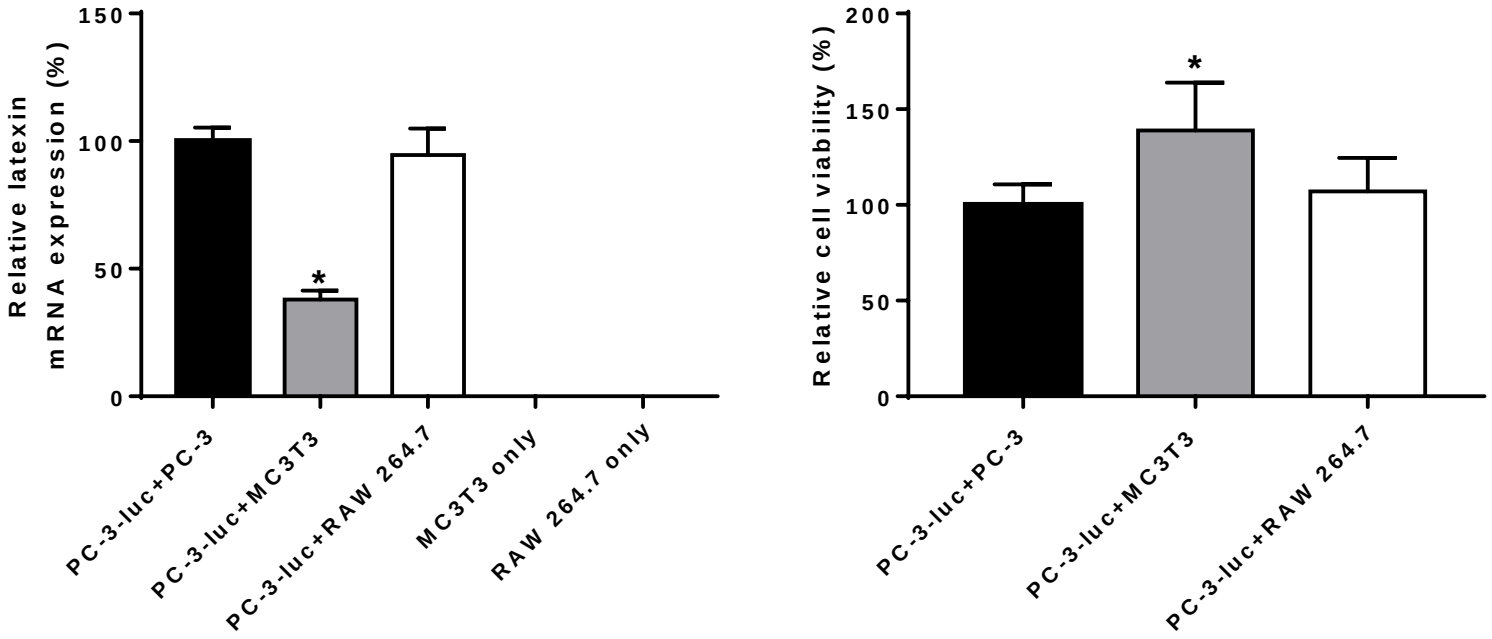


Supplemental Figure 2





Supplemental Figure 3



Supplemental Figure 4