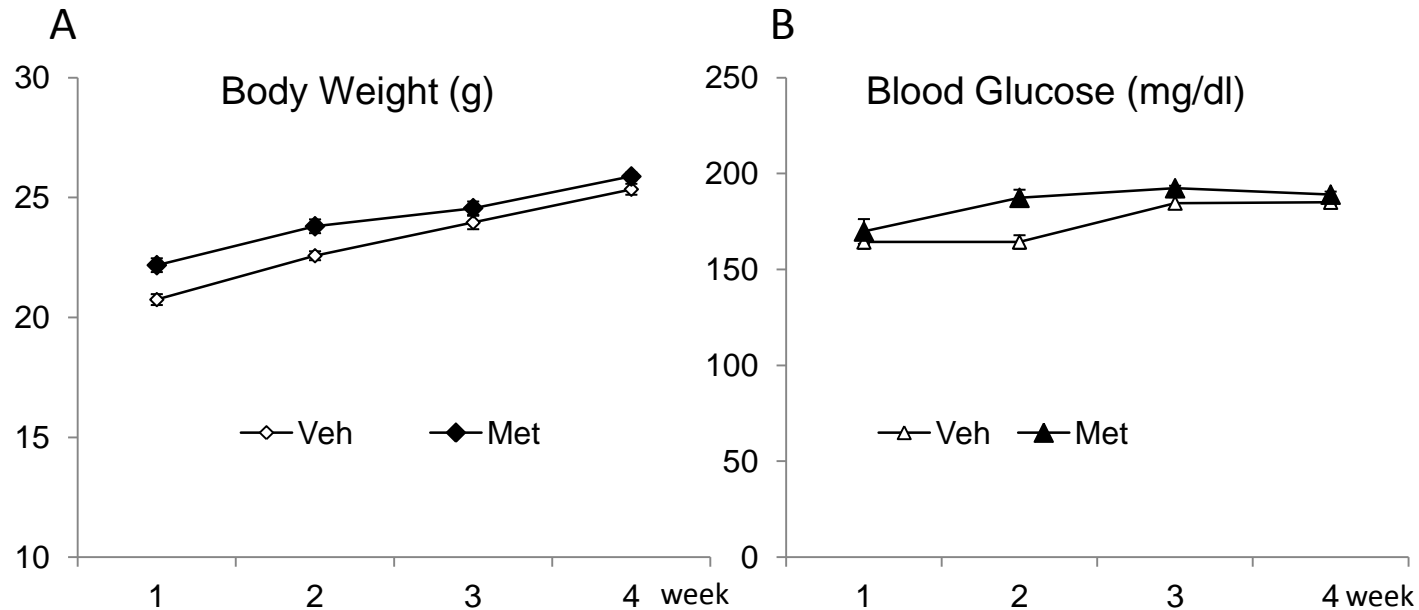
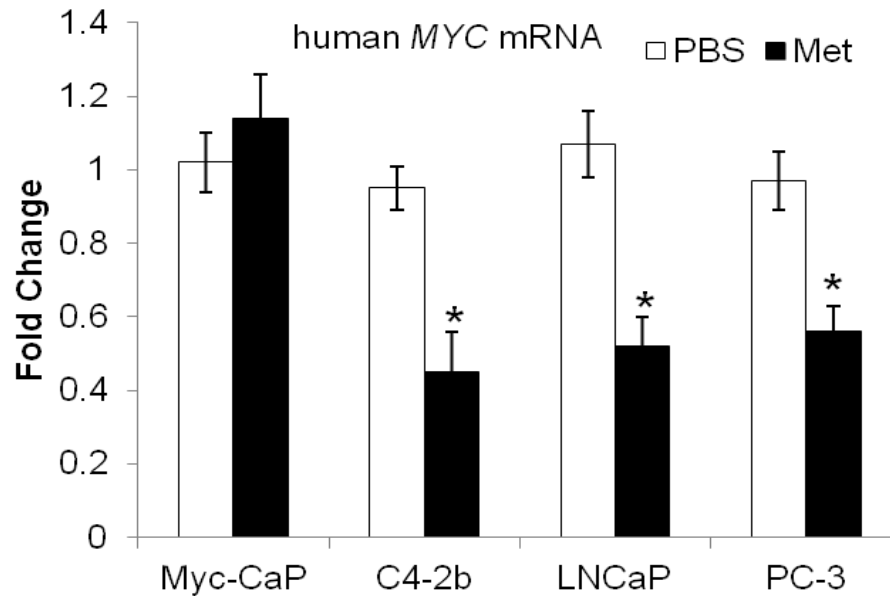


Supplementary Figure 1



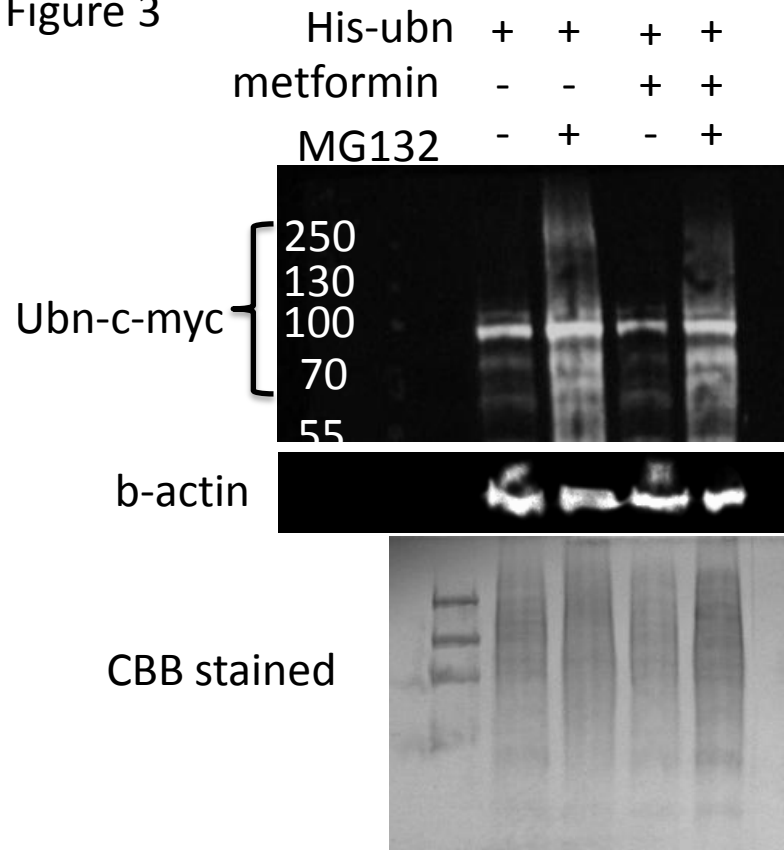
Metformin does not affect blood glucose levels and body weights in Hi-Myc mice. A) body weight and B) blood glucose levels over-4-week treatment with metformin or vehicle (Data shown are mean \pm SEM, N=6).

Supplementary Figure 2



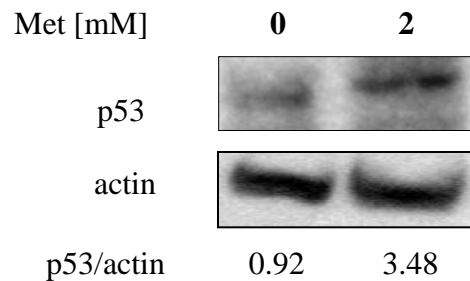
Metformin decreases human *MYC* mRNA levels in human prostate cancer cells but not Myc-CaP cells indicates metformin doesn't regulate the probasin promoter in Myc-CaP cells. Met: metformin 2mM 24h. N=3, * p<0.05 RNA was isolated using Trizol reagent (Invitrogen) following the manufacturer's protocol. One microgram of total RNA was reverse transcribed in a 20- μ L reaction volume containing random hexamers using a reverse-transcription assay system (Applied Biosystems, Foster City, CA, USA). Semiquantitative RT-PCR was performed on a PCR Mastercycler® ep Realplex (Eppendorf), and fold changes were determined via the $\Delta\Delta CT$ method with normalization to *ACTIN* mRNA levels.

Supplementary Figure 3



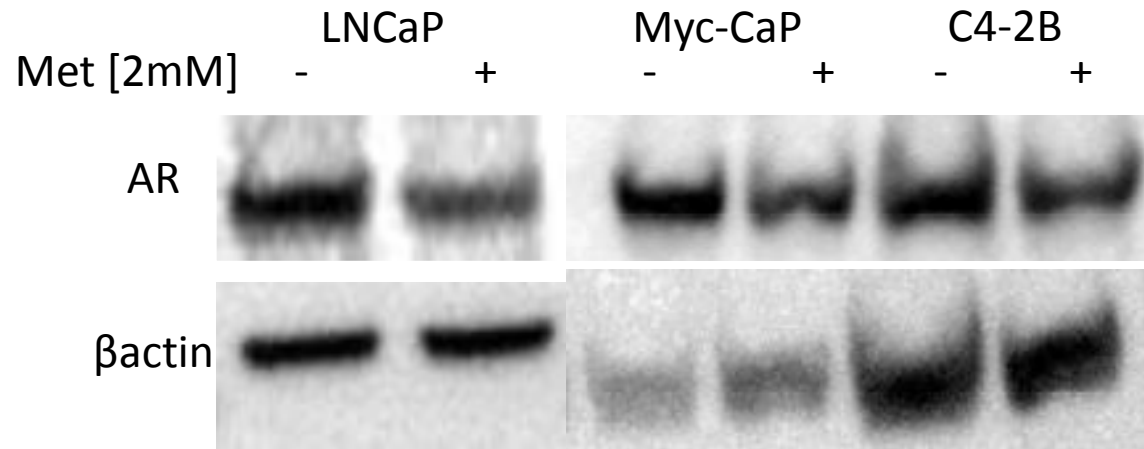
Inhibition of proteasome activity blocked c-myc degradation through ubiquitination. Myc-CaP cells were transiently transfected with (His)₆-ubiquitin and the cells were split 1:4 into 10-cm-diameter dishes 36 h posttransfection and treated with metformin (2 mM) with or without MG132 for 24h. The cells were lysed in Ab lysis buffer with followed by sonication. Cellular lysates were equalized for total protein concentration, and immunoprecipitation was performed followed by Western blot to detect c-Myc-(His)₆-ubiquitin conjugates (Ubn-c-myc) and b-actin levels as loading control.

Supplementary Figure 4



Metformin increases p53 protein levels in C4-2b cells. Cells were seeded into 10-cm dishes and treated with 2mM metformin or Veh. Whole cell lysates were harvested 24 h later and p53 expression was detected by Western blot. β -actin was used as loading control.

Supplementary Figure 5



Metformin reduces androgen receptor expression *in vitro*.

Western blot on AR using whole cell lysates from LNCaP, Myc-CaP and C4-2b cells treated with metformin or vehicle for 24h.