

Figure S1: Expression of cytochrome c (CC) mRNA in PCa cells using RT-PCR (A). Mean intensity per cell of CC in immunofluorescence images shown in Figure 1B (n=10) (B). Data represent mean \pm SD of 3 independent experiments. *p < 0.05 vs respective groups.

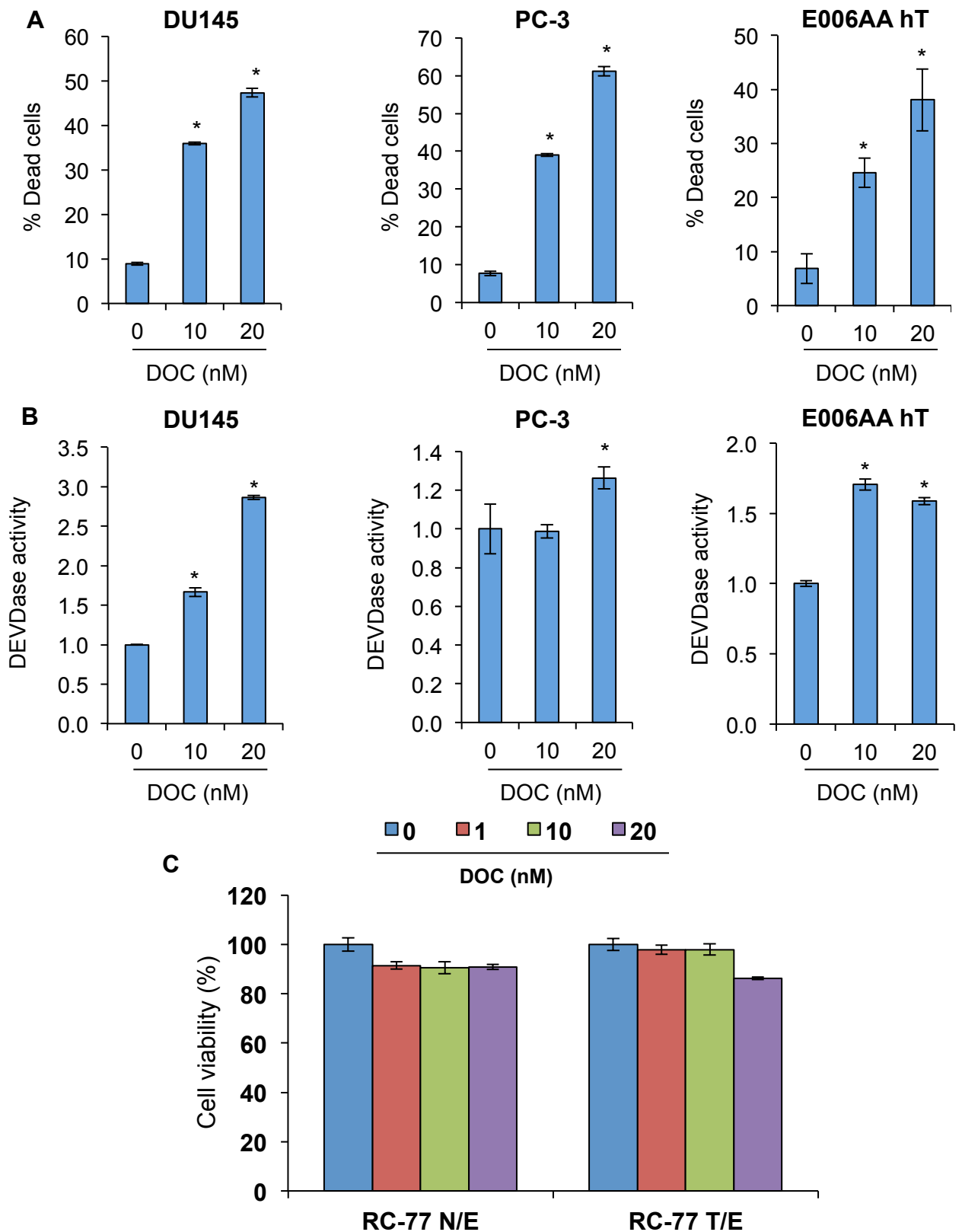


Figure S2: Cell death (A) and DEVDase activity (B) in PCa cells in response to DOC treatment (10 and 20 nM) for 24 hrs were quantified using Trypan blue and DEVDase activity, respectively. Effect of docetaxel (DOC for 24 hrs) on cell viability in AA PCa cells (C). Data represent mean \pm SD of 3 independent experiments. * $p < 0.05$ vs controls.

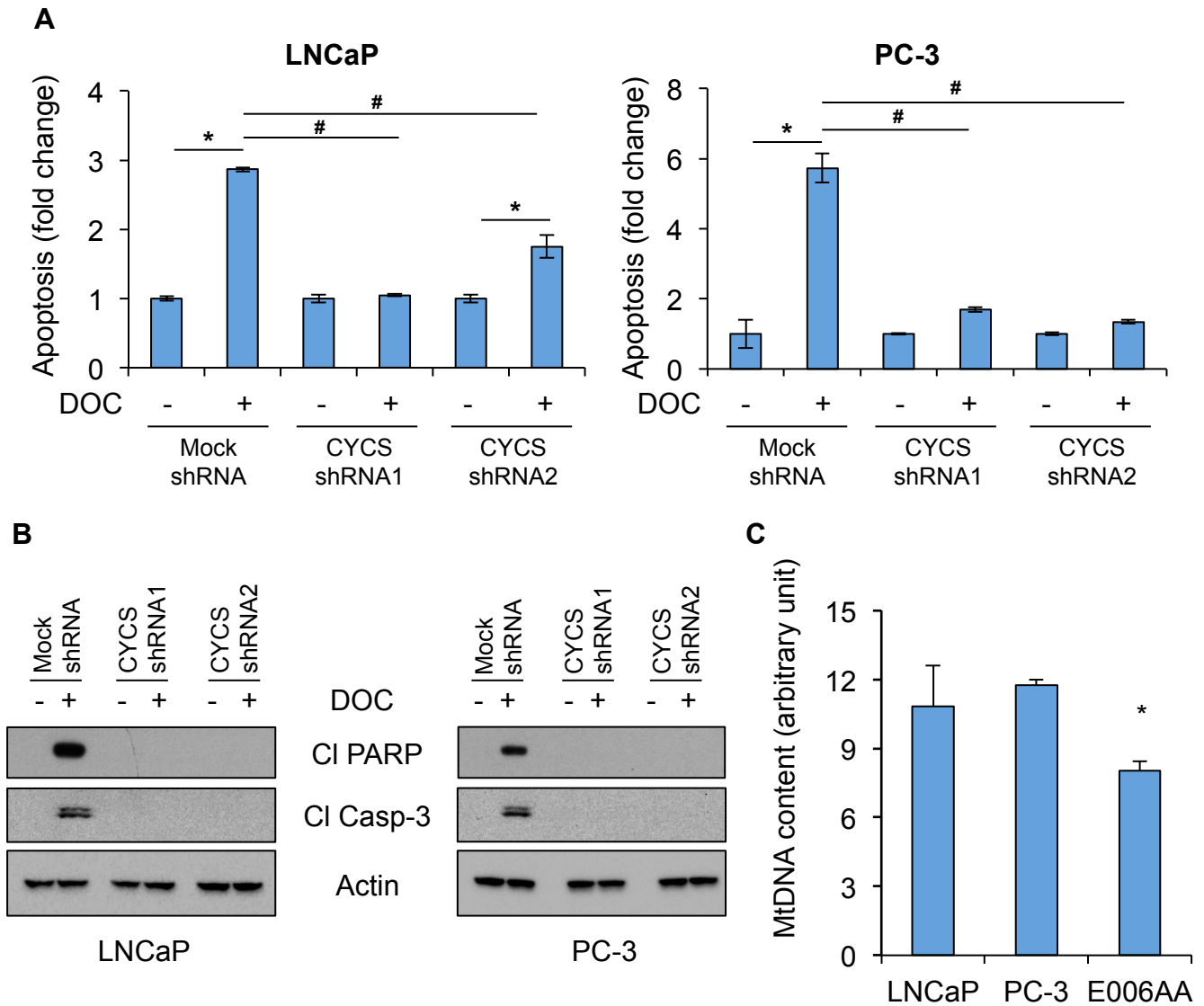


Figure S3: CC expression was knocked down in LNCaP and PC-3 cells using shRNAs followed by treatment with DOC (20 nM) for 24 hrs (LNCaP) or 48 hrs (PC-3). Apoptotic cell death was analyzed using annexin V-FITC/PI labeling (A). Whole cell lysates were prepared and analyzed for cleaved PARP and caspase-3 using immunoblotting (B). MtDNA content in CA and AA PCa cell was analyzed using RT-PCR (C). Data represent mean \pm SD of 3 independent experiments. * $p < 0.05$ vs respective groups; # $p < 0.05$ vs respective groups.

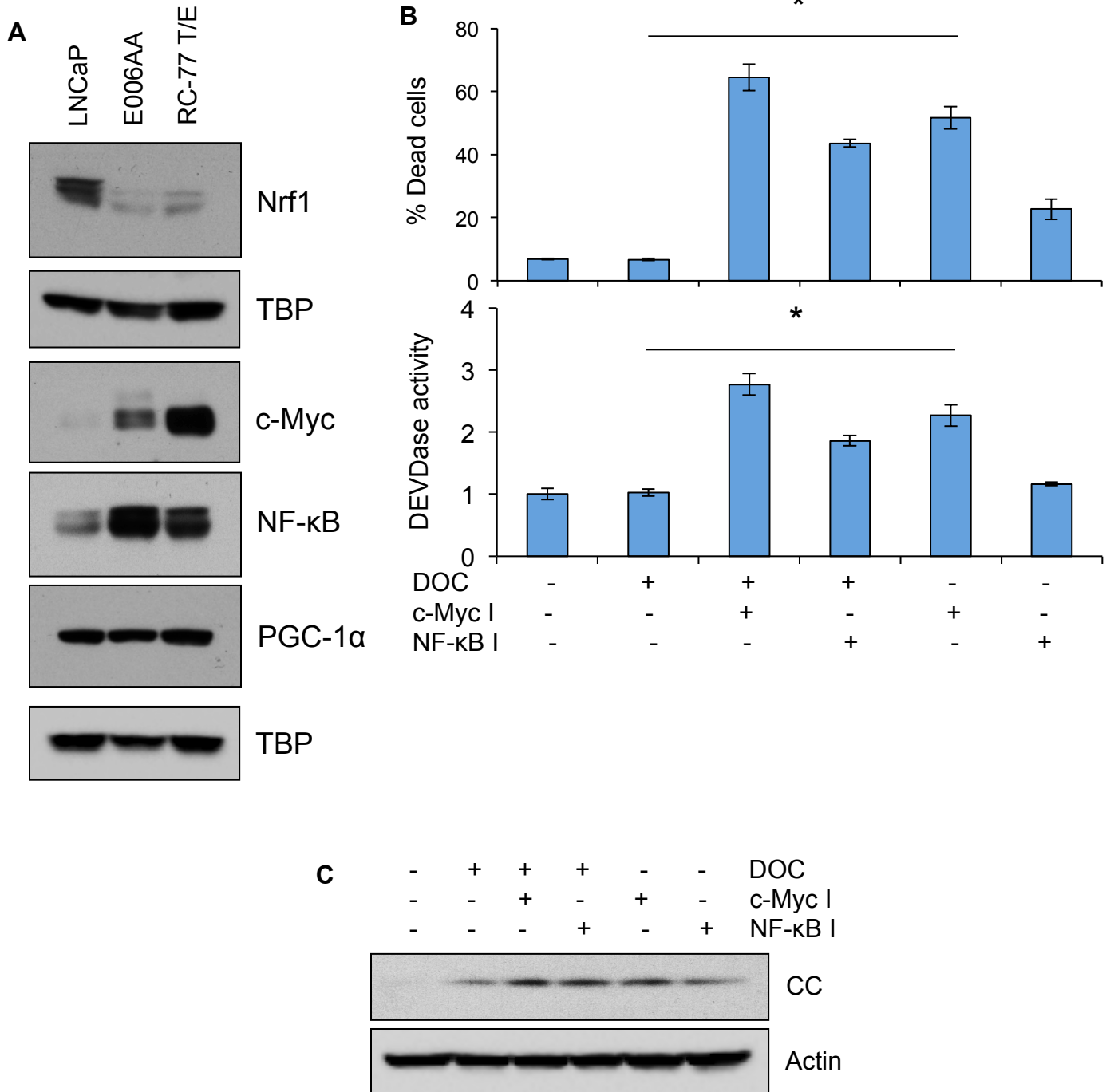


Figure S4: Nuclear levels of Nrf1, c-Myc, NF-κB and PGC-1α in CA and AA PCa cells were analyzed using immunoblotting (A). Cell death quantification and DEVDase activity measurement (B); and CC expression analysis (C) were performed in RC-77 T/E AA PCa cells following DOC treatment with or with out c-Myc I and NF-κB I treatment for 24 hrs. Data represent mean ± SD of 3 independent experiments. *p < 0.05 vs respective groups.

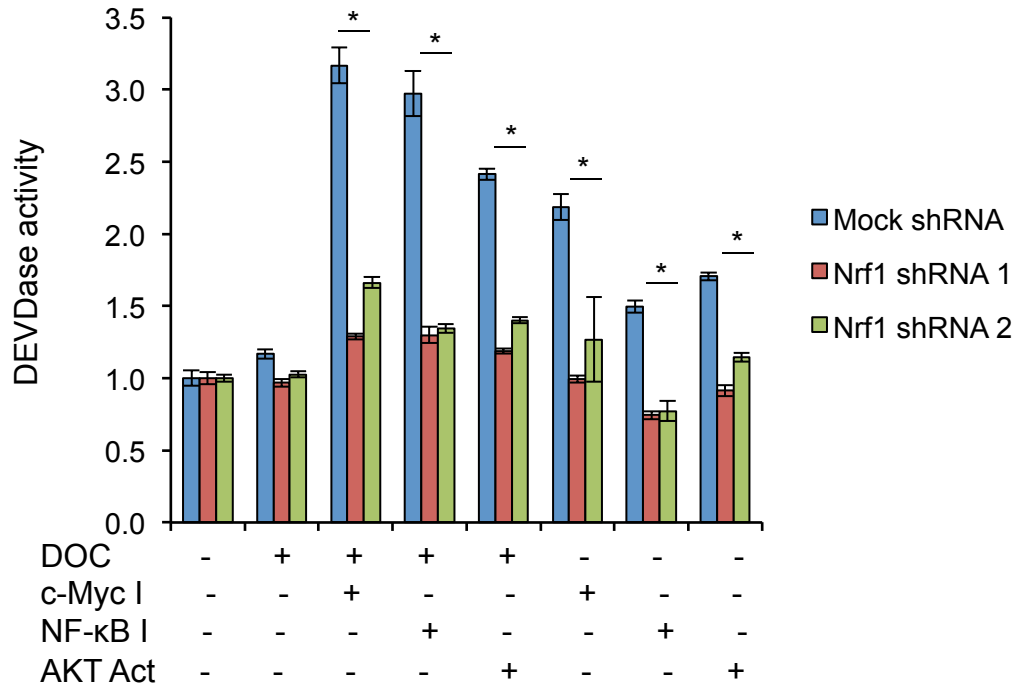
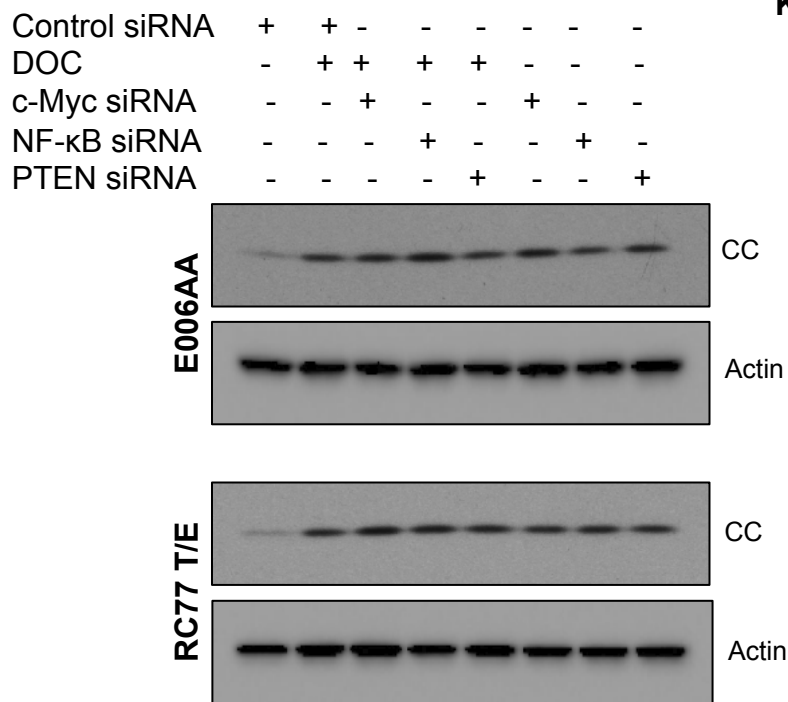


Figure S5: Knockdown of Nrf1 using shRNA inhibits DEVDase activity in E006AA cells treated with either c-Myc inhibitor (c-Myc I) or NF-κB inhibitor (NF-κB I) or AKT activator (AKT Act) alone or in combination with DOC (10 nM) after 24 hrs. Data represent mean \pm SD of 3 independent experiments. * $p < 0.05$ vs respective groups.

A



B

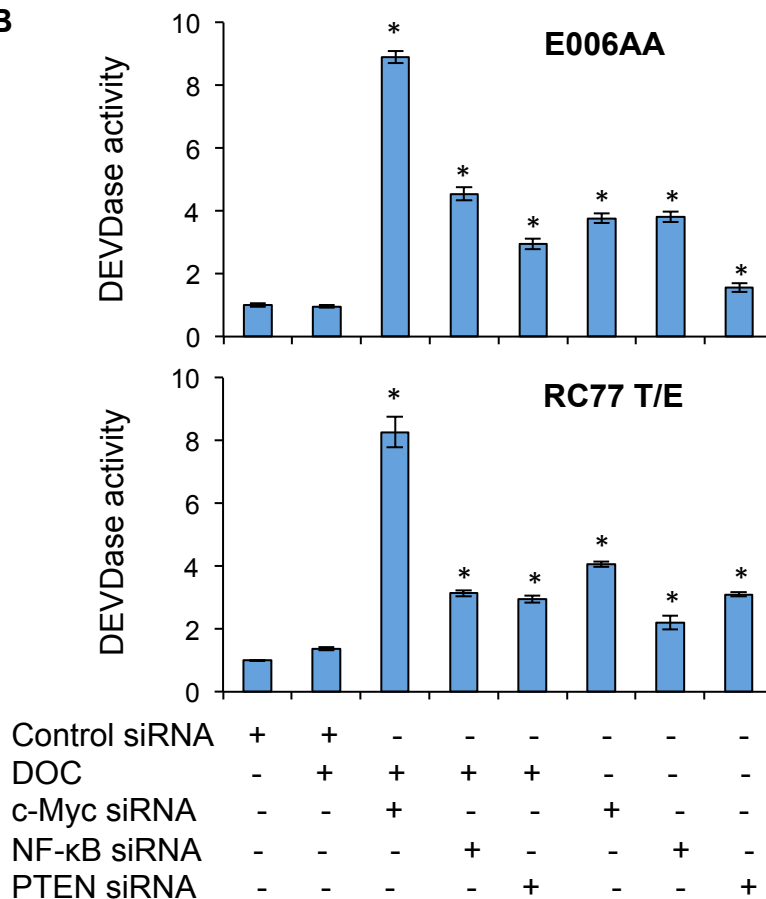
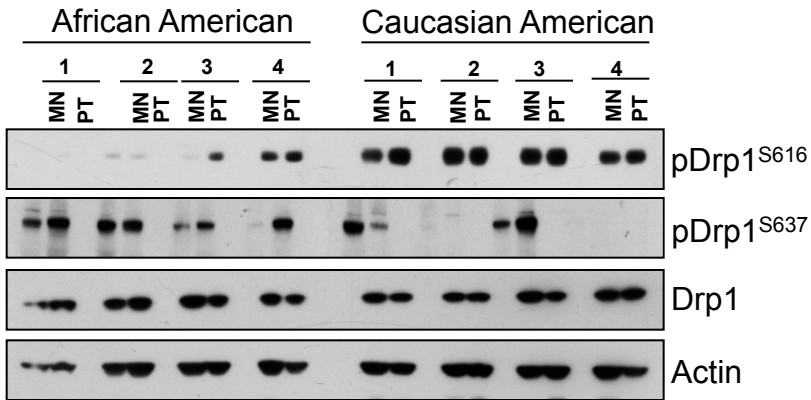


Figure S6: Either c-Myc or p65 subunit of NF-κB or PTEN were knocked down in E006AA and RC77 T/E cells using siRNA followed by treatment with DOC (10 nM) for 24 hr. Whole cell lysate were prepared and analyzed for CC expression (A) and DEVDase activity (B). Data represent mean \pm SD of 3 independent experiments. *p < 0.05 vs respective groups.

A



B

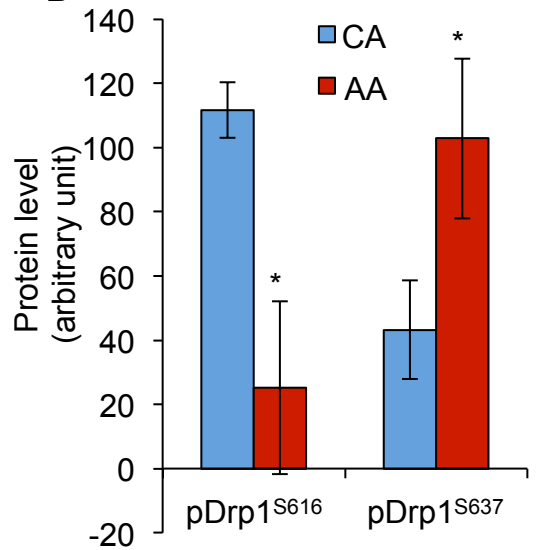


Figure S7: (A) Representative immunoblot of pDrp1^{S616}, pDrp1^{S637} and Drp1 in matched non-tumor (MN) and primary tumor (PT) tissue samples from AA and CA men with PCa. (B) Densitometry analysis of immunoblots of pDrp1^{S616} and pDrp1^{S637} PT tissues from AA and CA men with PCa (n=12 for each race). Actin serves as a loading control. *p < 0.05 vs respective groups.

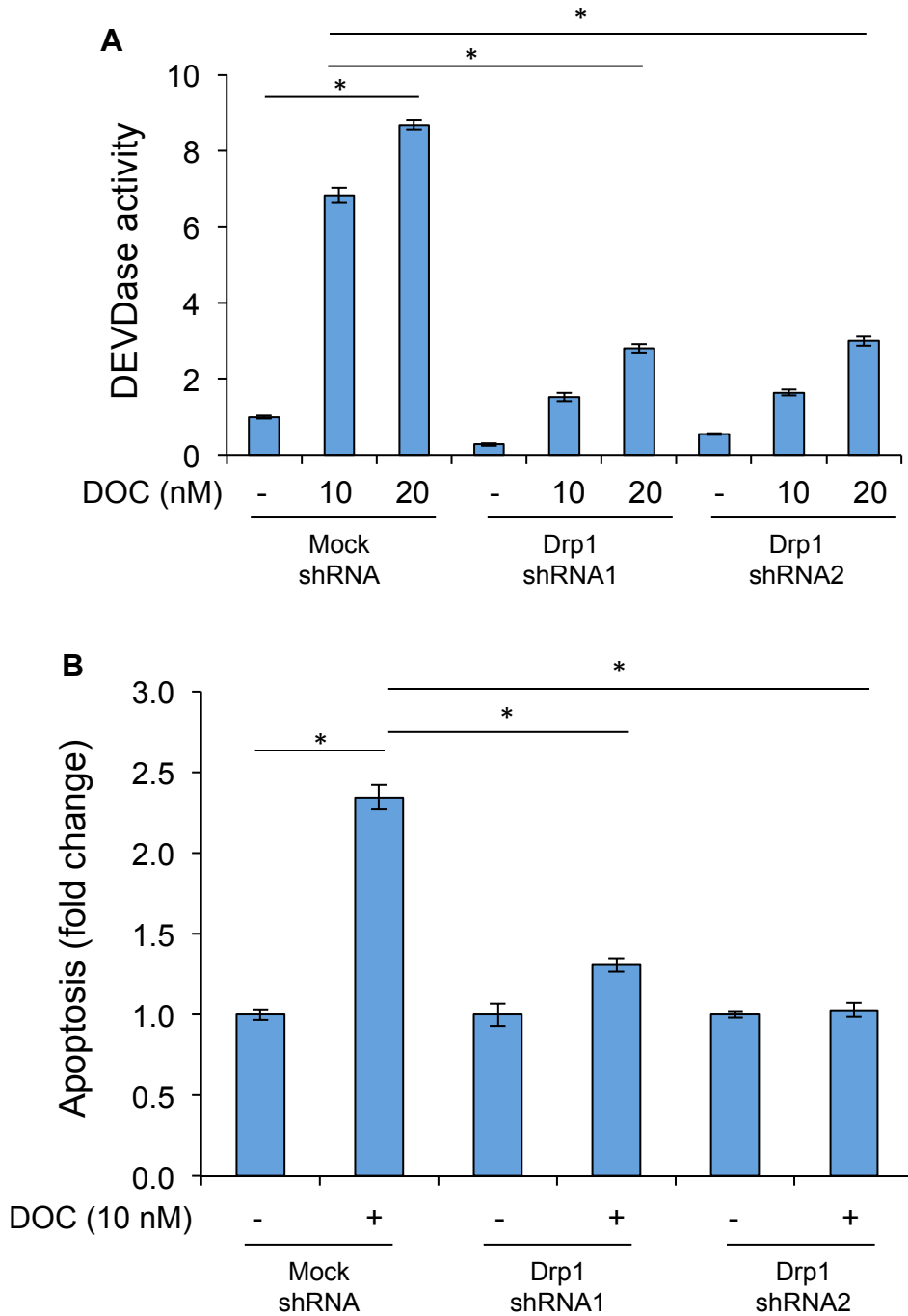


Figure S8: Knockdown of Drp1 using shRNA inhibits DEVDase activity (A) and apoptotic cell death (B) in LNCaP cells treated with DOC for 24 hrs. Data represent mean \pm SD of 3 independent experiments. * $p < 0.05$ vs respective control.

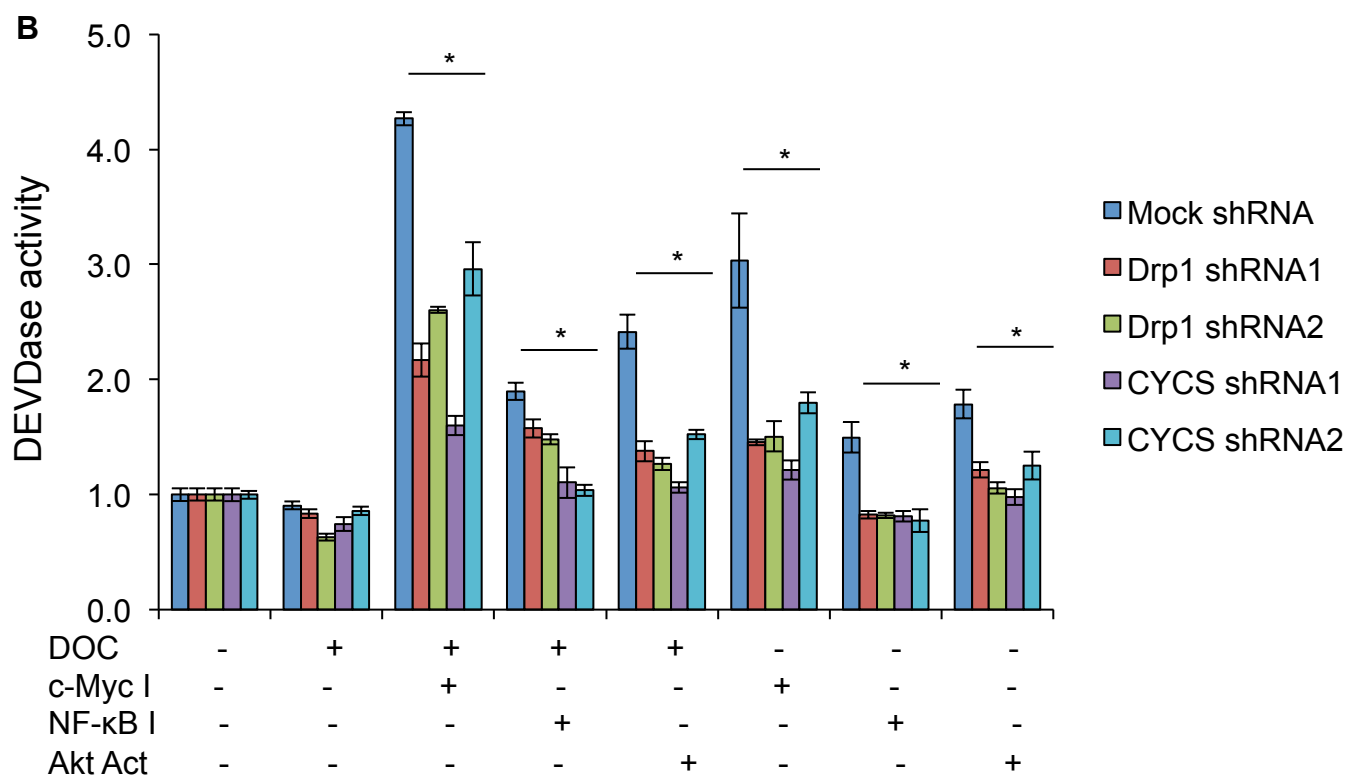
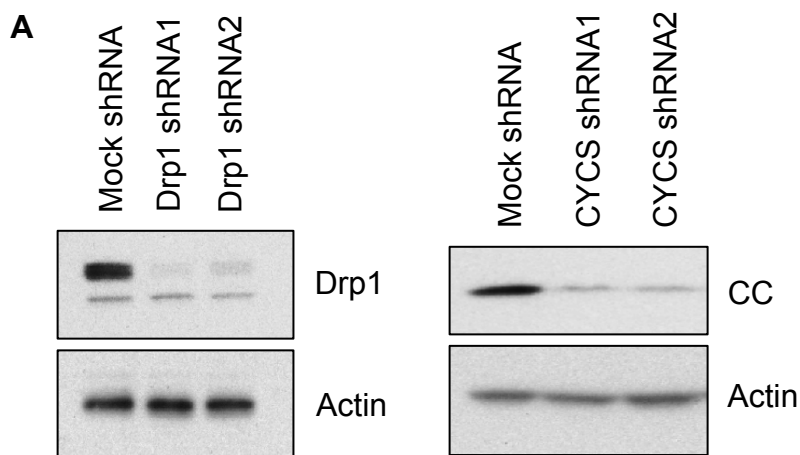


Figure S9: Knockdown of Drp1 and CYCS using shRNA (A) inhibit DEVDase activity in E006AA cells treated with either c-Myc inhibitor (c-Myc I) or NF-κB inhibitor (NF-κB I) or AKT activator (AKT Act) alone or in combination with DOC (10 nM) after 24 hrs (B). Data represent mean \pm SD of 3 independent experiments. * $p < 0.05$ vs respective groups; # $p < 0.05$ vs respective groups.

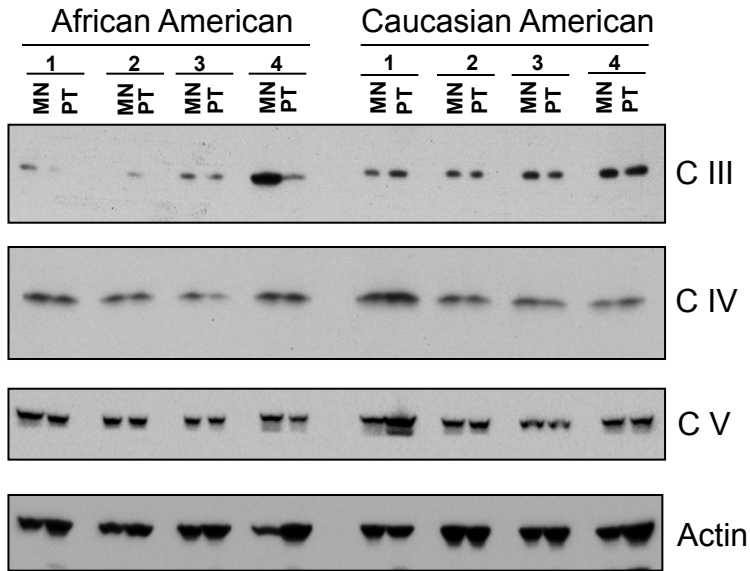
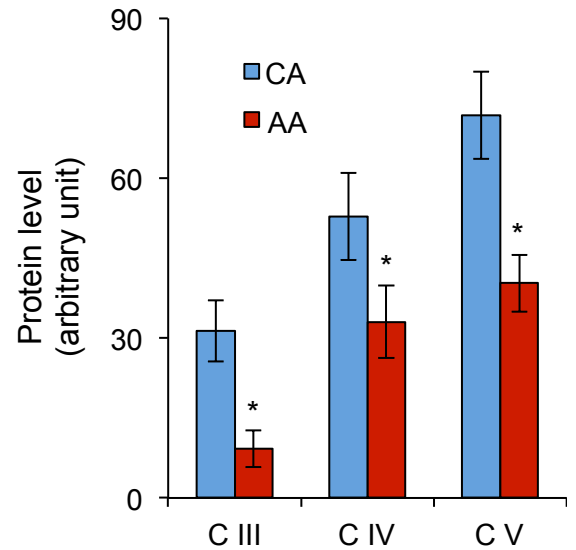
A**B**

Figure S10: (A) Representative immunoblot of oxidative phosphorylation (OXPHOS) complex III (C III), complex IV (C IV) and complex V (C V) in matched non-tumor (MN) and primary tumor (PT) tissue samples from AA and CA men with PCa. (B) Densitometry analysis of immunoblots of C III, C IV and C V in PT tissues from AA and CA men with PCa (n=12 for each race). Actin serves as a loading control. *p < 0.05 vs respective groups.

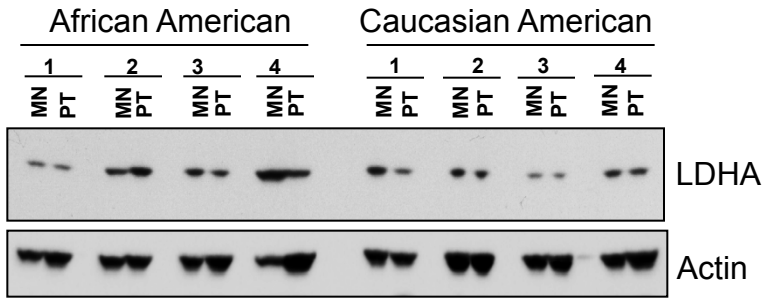
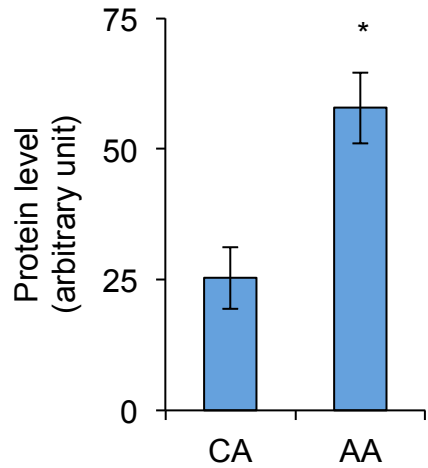
A**B**

Figure S11: (A) Representative immunoblot of lactate dehydrogenase A (LDHA) in matched non-tumor (MN) and primary tumor (PT) tissue samples obtained from AA and CA men with PCa. (B) Densitometry analysis of immunoblots of LDHA in PT tissues from AA and CA men with PCa (n=12 for each race). *p < 0.05 vs respective group.