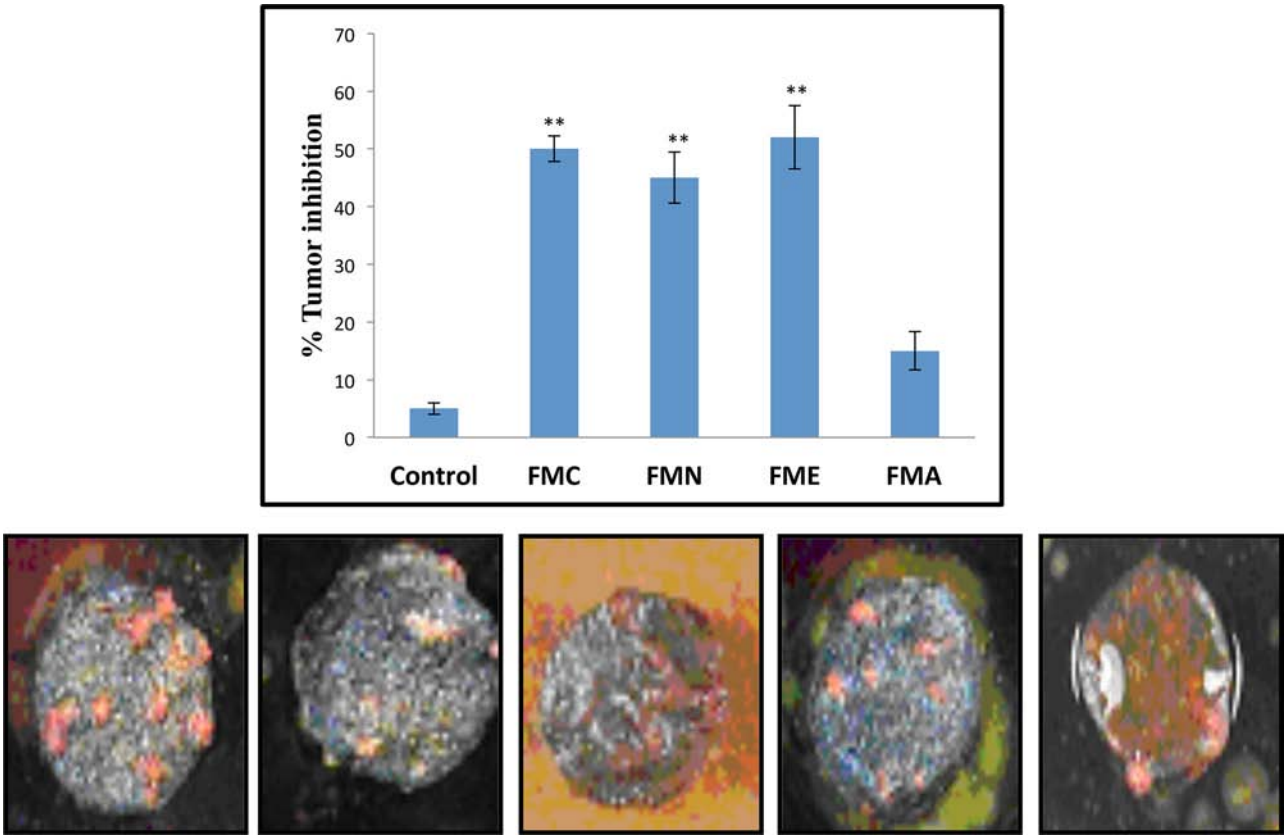
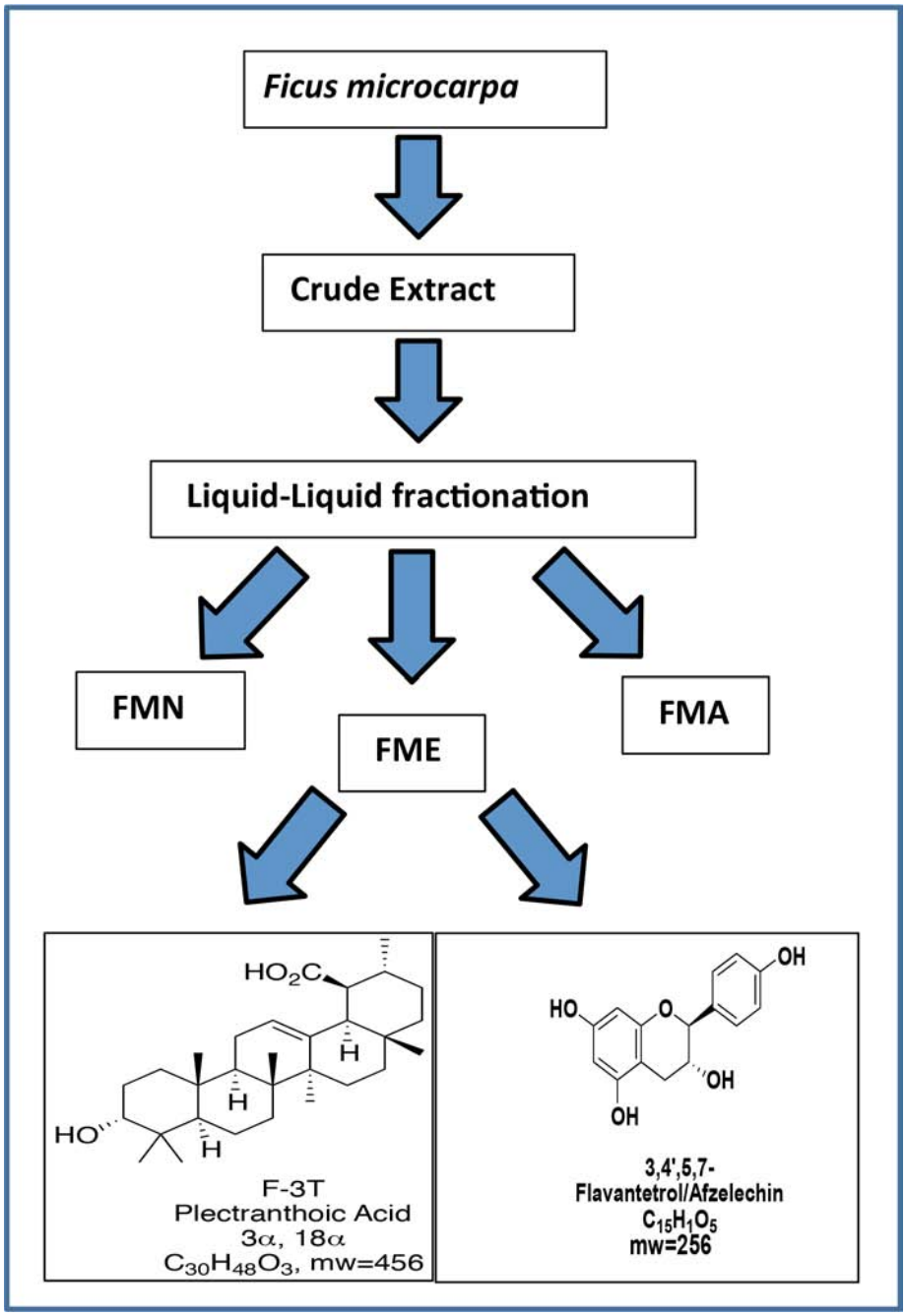
SUPPLEMENTARY FIGURES



Supplementary Figure S1: Potato disc antitumor assay showing tumor inhibition by *Ficus microcarpa* crude extract (FMC) and its fractions (FMN, FME and EMA).

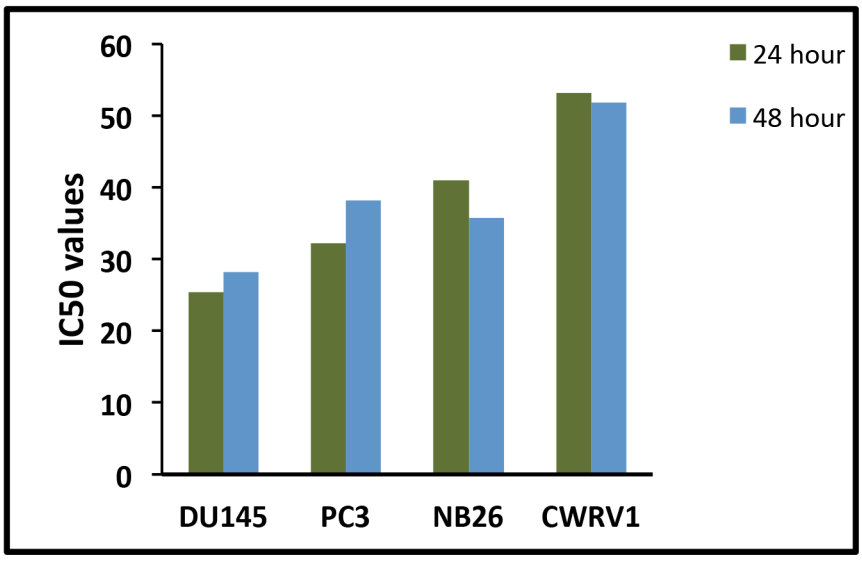


Supplementary Figure S2: Flow chart for isolation of PA and FL from *Ficus microcarpa*. Crude extract was separated into 3 fractions (FMN, FME and EMA) by liquid-liquid fractionation and both compounds were extracted from ethyl acetate fraction (FME).

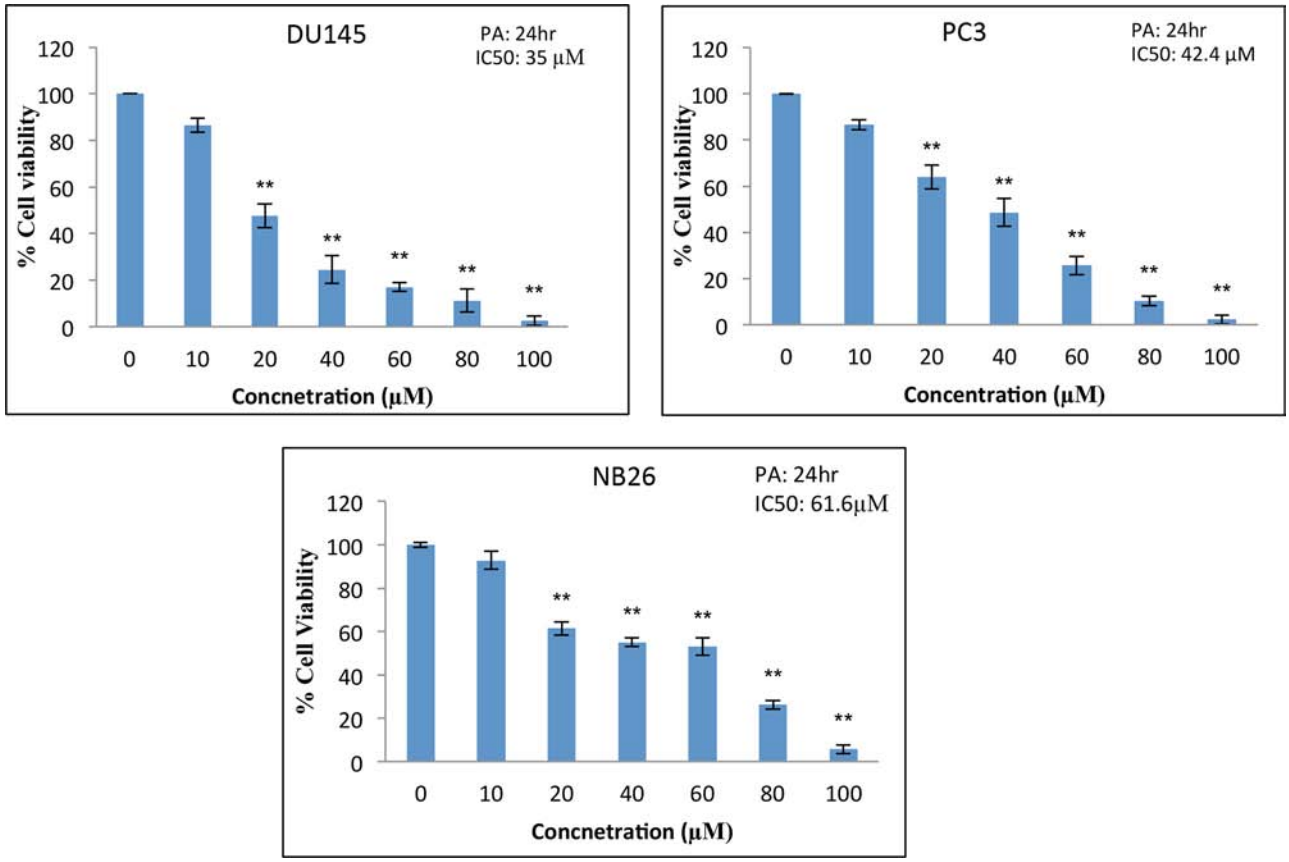
A

	DU145 (IC50: µM)	PC3 (IC50: µM)	CWRV1 (IC50: µM)	NB26 (IC50: µM)	A375 (IC50: µM)
FMC	67	96	94	97.3	100
FMN	70	100.3	97	89.8	116
FME	70.4	89	94.1	88.3	108
FMA	101	152.3	112.9	72	146.1

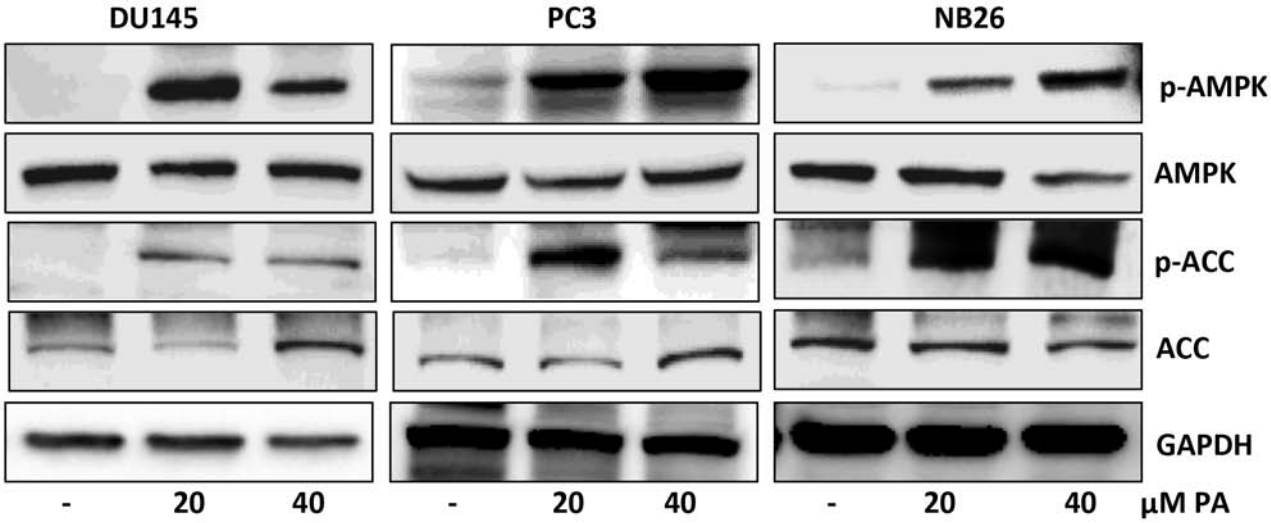
B



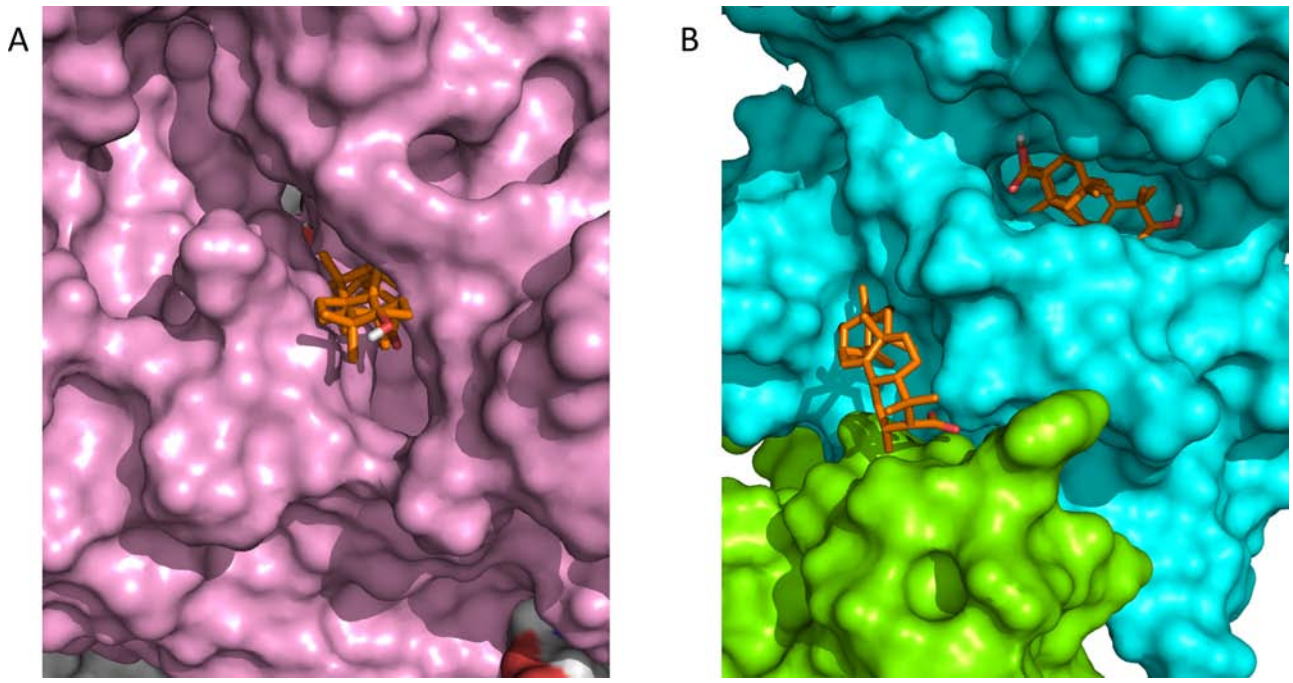
Supplementary Figure S3: Effects of crude extract and fractions of *Ficus microcarpa* on the viability of melanoma and prostate cancer cells. A. Cells were treated with FMC, FMN, FME and FMC at the indicated concentrations for 24h, and cell viability was assessed by MTT assays IC_{50} values are tabulated. **B. Time course analysis of the effect of PA on prostate cancer cells:** DU145, PC3, NB26 and CWRV1 were incubated with PA for 24 and 48h, cell viability was assessed by MTT, and IC_{50} values were calculated and plotted.



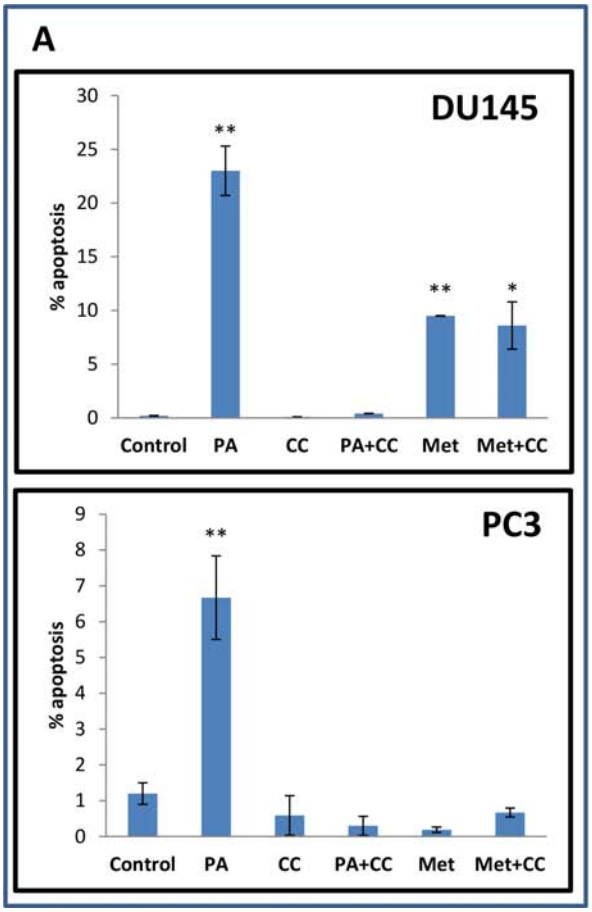
Supplementary Figure S4: Effects of PA on the viability of prostate cancer cells. Cells were treated with PA at the indicated concentrations in for 24h, and cell viability was assessed by BrDU assay (Cell Signaling), as per manufacturer's protocol.

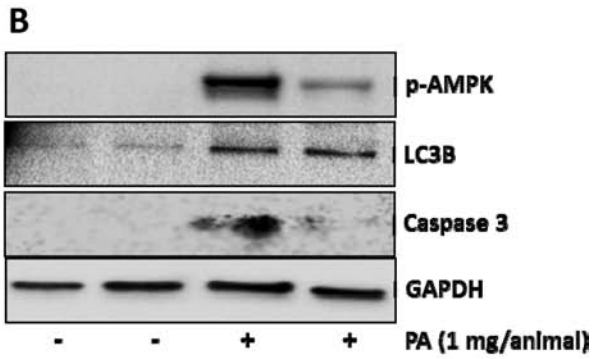


Supplementary Figure S5: Effects of PA on AMPK signaling. Whole cell lysates of PC3, NB26 and DU145 cells with/without PA (20–40µM:24h) treatment were subjected to SDS-polyacrylamide for expression of p-AMPK, AMPK, p-ACC and ACC. Equal loading was confirmed by reprobing with GAPDH. The immunoblots shown are representative of three independent experiments with similar results.



Supplementary Figure S6: Binding of PA with γ, α and β subunits. PA docked to AMPK by autodoc4. The model used was the AMPK structure with ligands in the PDB entry 4CFF (DOI: 10.1038/ncomms4017, Nature Communications). **A.** Surface pocket shows PA binding at γ subunit. **B.** Surface pocket shows PA binding at α and β subunits.





Supplementary Figure S7: A. PA induces apoptosis in an AMPK dependent manner. Cells were labeled with FITC and analyzed by flow cytometry. Percentage of apoptotic cells with different treatments are plotted in the graph. The results are expressed as normalized average ± S.D. of three independent experiments. **B.** Whole cell lysates of *CWR*22Rv1 xenografts implanted in athymic nude mice, treated with/without PA were subjected to SDS-polyacrylamide gel electrophoresis. Equal loading was confirmed by reprobing with GAPDH. The immunoblots shown are representative of three independent experiments with similar results.