SUPPLEMENTAL MATERIAL:

A

Cell line	Androgen receptor	Docetaxel resistance (nM)	Cabazitaxel resistance (nM)
IGR-CaP1	-	100	50
PC3	-	12	15
LNCaP	+	12	15
22RV1	+	100	50

B

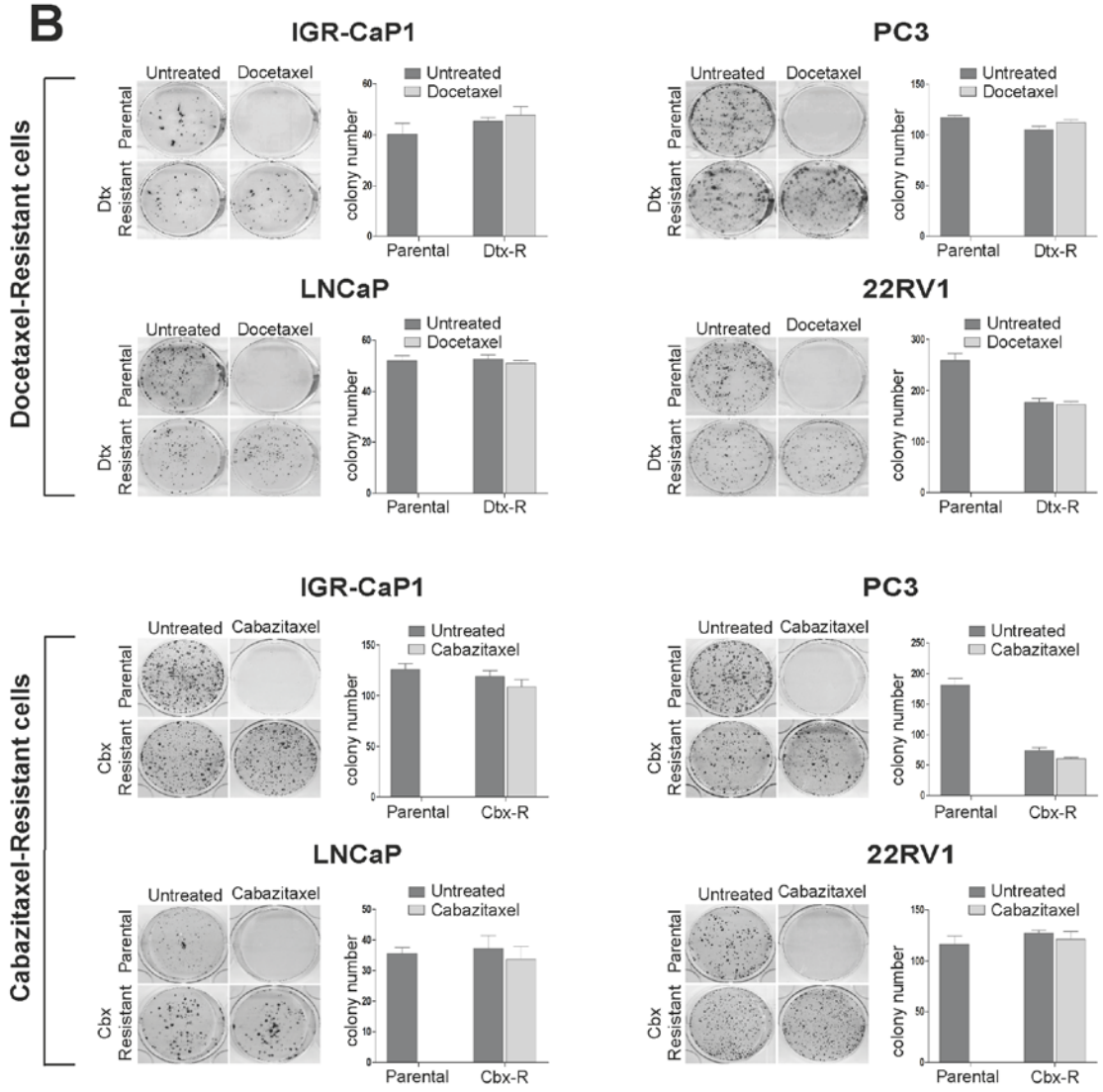

Figure S1. Characteristics of chemoresistant prostate cancer cells. (**A**) Table summarizing the androgen receptor status and the maximal dose of resistance obtained with docetaxel and cabazitaxel for IGR-CaP, PC3, LNCaP and 22RV1. (**B**) Clonogenicity assay; pictures of the representative stained clones obtained for parental or chemoresistant cells after control, docetaxel or cabazitaxel treatment. Colony count is represented as mean ± SD.

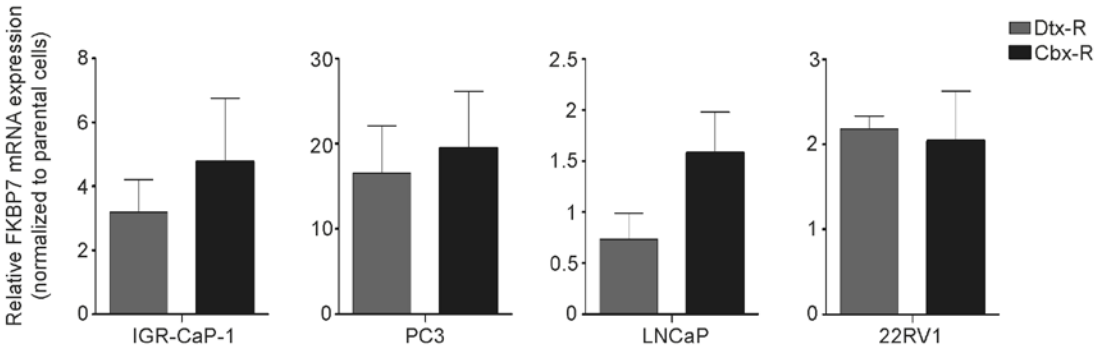

Figure S2. Upregulation of FKBP7 mRNA levels in chemoresistant prostate cancer cells. Quantitative RT-PCR (qRT-PCR) of FKBP7 mRNA level in docetaxel (Dtx-R) or cabazitaxel (Cbx-R) resistant cells, normalized to parental cells and GUSB. Data shows mean ± SD (n=3).

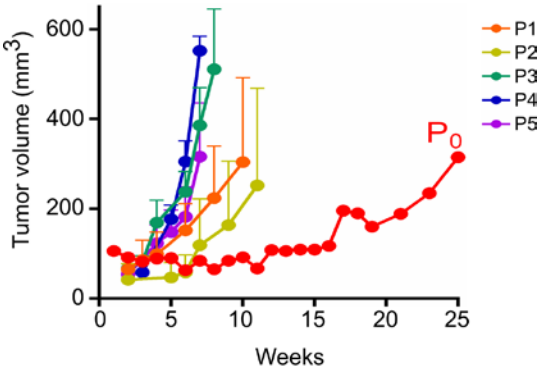

Figure S3: Increase of tumorigenicity of chemoresistant tumors through successive passages in mice. Tumor growth during the five passages done to generate the docetaxel resistant mice model. The data shows the mean ± SEM.

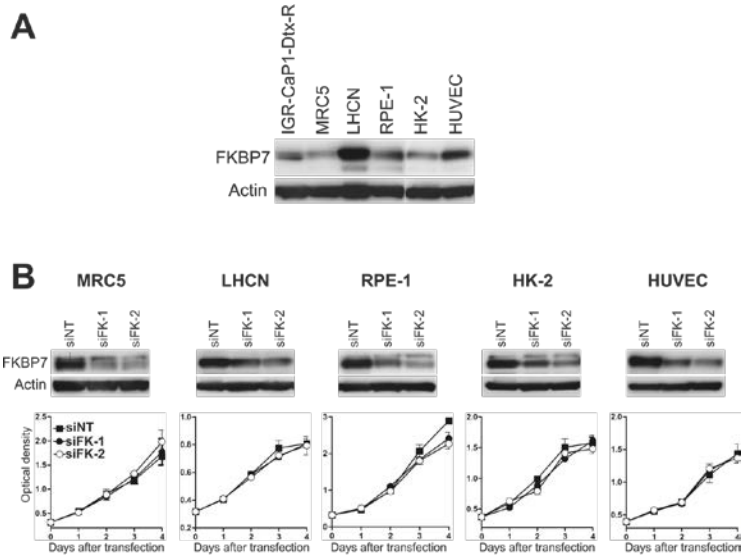

Figure S4: FKBP7 silencing does not affect cell growth in non-tumorous cells. (**A**) Immunoblot showing FKBP7 protein level in various non-cancerous cells, with IGR-CaP1-Dtx-R as a control of FKBP7 expression.

Actin is the loading control. (**B**) Immunoblot shows FKBP7 knockdown efficiency 48h after transfection with either two different siRNA sequences targeting FKBP7 (siFK-1 (●) or siFK-2 (○)) or control siRNA (siNT, ■). Cell viability with cells transfected with either two different siRNA sequences targeting FKBP7 or control siRNA is determined daily with WST1.

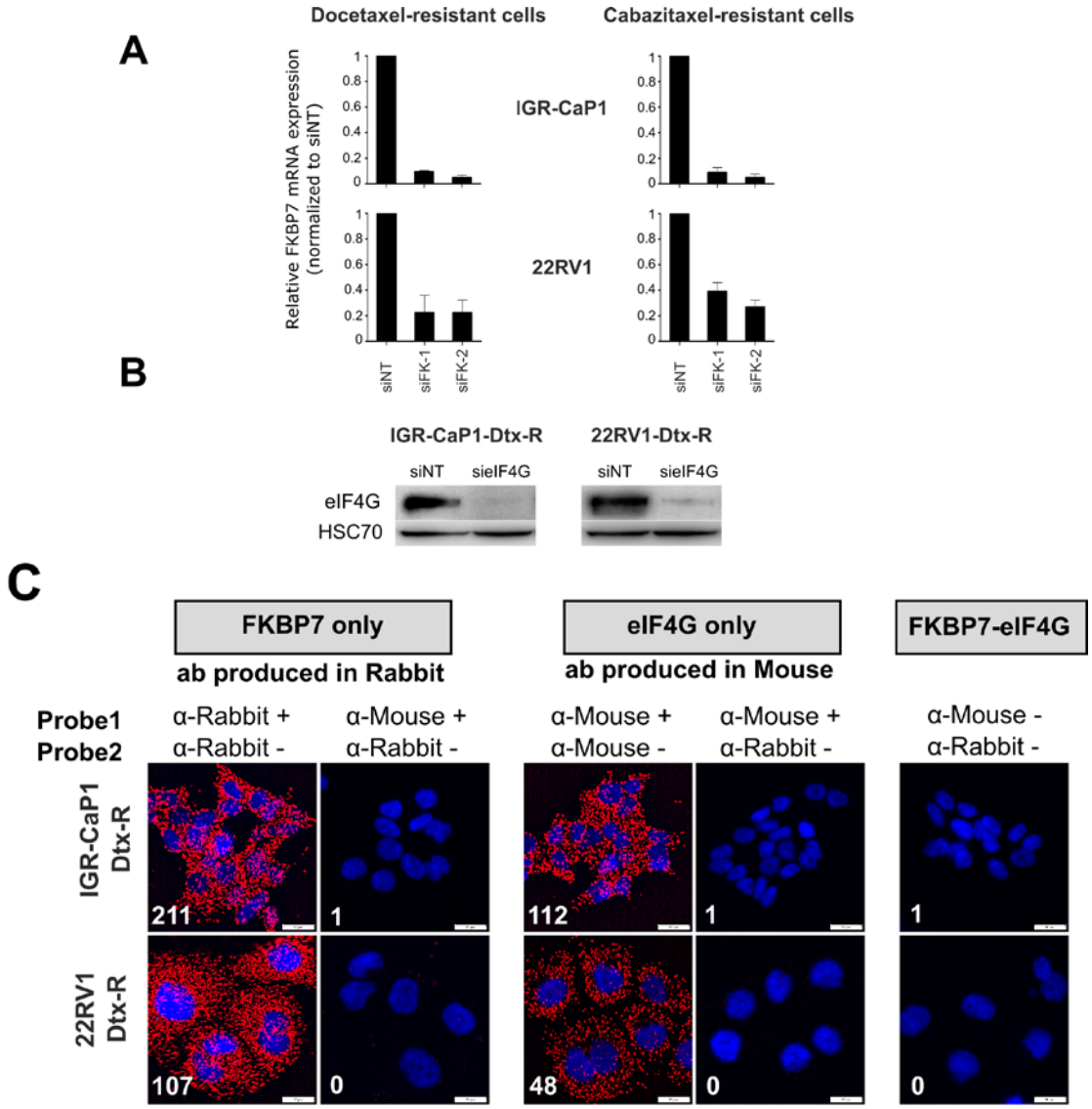

Figure S5: FKBP7 regulates the formation of eIF4F translation initiation complex through a direct interaction with eiF4G. (**A**) Quantitative RT-PCR (qRT-PCR) showing the FKBP7 knockdown efficiency 48h after transfection with either two different siRNA sequences targeting FKBP7 (siFK-1 or si-FK-2) or control siRNA (siNT) in docetaxel- or cabazitaxel-resistant IGR-CaP1 and 22RV1. FKBP7 mRNA level was normalized to siRNA control and with GUSB. (**B**) Immunoblots showing eIF4G knockdown efficiency 48h after transfection with either siRNA targeting eIF4G (sieIF4G) or siRNA control (siNT) in docetaxel resistant IGR-CaP1 and 22RV1 (IGR-CaP1-Dtx-R and 22RV1-Dtx-R respectively). HSC70 is the loading control. (**C**) Proximity ligation assay (PLA) performed in order to prove the specificity of FKBP7-eIF4G interaction. The interactions studied are noted in grey rectangles and the probes used are listed. The expression of FKBP7, of eIF4G and the interaction FKBP7-eIF4G were detected in docetaxel-resistant IGR-CaP1 (IGR-CaP1-Dtx-R) and 22RV1 (22RV1-Dtx-R).The interactions were visualized as red dots and the nuclei in blue. The white numbers indicate the mean calculated on at least 100 cells. Bars represent 20µm.

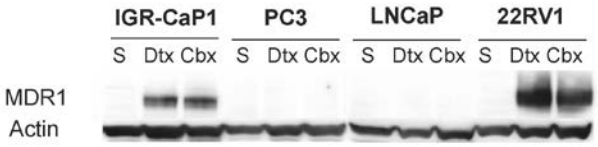

Figure S6: Expression of MDR1 in prostate cancer cell lines. Immunoblots shows MDR1 level in parental (S) and docetaxel (Dtx) or cabazitaxel (Cbx) resistant IGR-CaP1, PC3, LNCaP and 22RV1. Actin is the loading control.

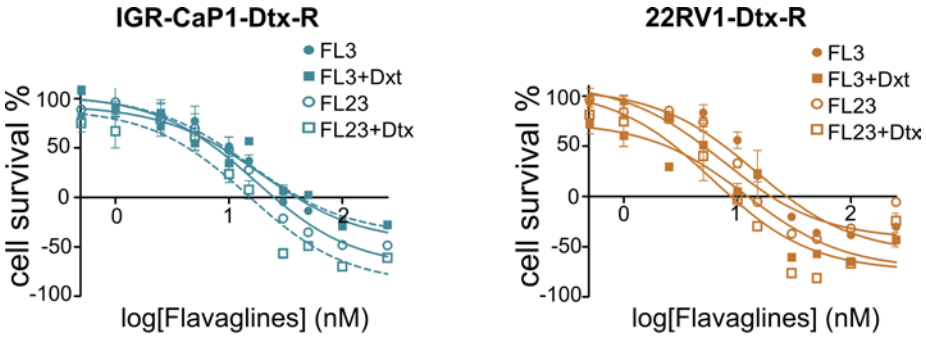

Figure S7. Effect of the combination of Docetaxel with Flavaglines on cell proliferation of chemoresistant cells. Cell proliferation assay; cell viability (calculated relatively to control treatment) of docetaxel-resistant cells IGR-CaP1 and 22RV1 (IGR-CaP1-Dtx-R and 22RV1-Dtx-R respectively) treated either with flavagline 3 or 23 alone or in association with docetaxel (50nM). The data are represented as the mean ± SD.