Supplementary Figures

**Prostate cancer cells hyper-activate CXCR6 signaling by cleaving CXCL16 to overcome effect of docetaxel**

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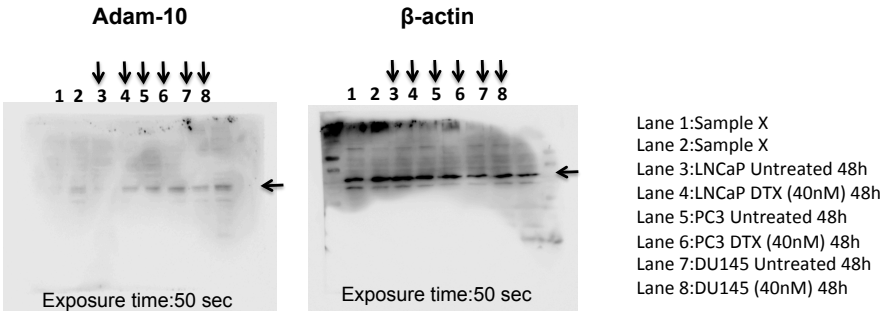
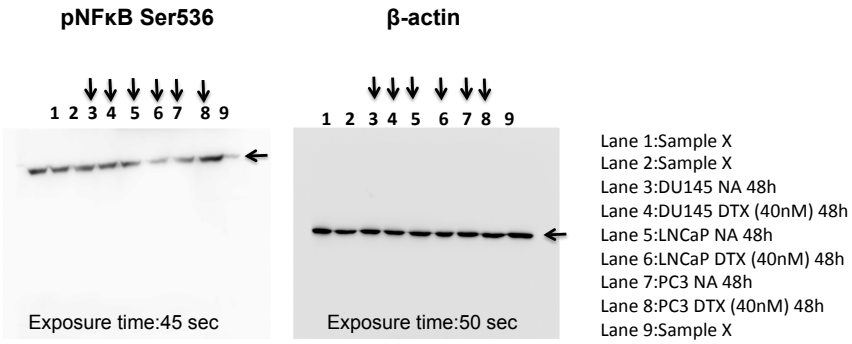
**Docetaxel induced ADAM-10 expression in prostate cancer cells.**



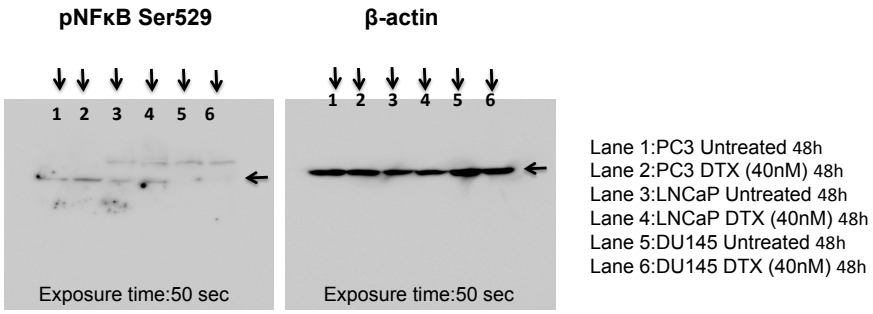

**Supplementary figure 1.** Western blot showing changes in expression of Adam-10 in PCa cells treated with DTX (40nM). Lane 1 and 2 are not used for this manuscript. Lane 3 and 4 represents untreated and DTX (40nM) treated LNCaP cells; Lane 5 and 6 represents untreated and DTX (40nM) treated PC3 cells; Lane 7 and 8 represents untreated and DTX (40nM) treated DU145 cells. Images for lane 3-8 were cropped and used for Figure 3B.

**Docetaxel induced NF-κB activation in prostate cancer cells.**




**Supplementary figure 2.** Western blot showing changes in phosphorylation status of NFkB Ser-536 in prostate cancer cells treated with DTX (40uM). Lane 1, 2 and 9 are not used for this manuscript. Lane 3 and 4 represents untreated and DTX (40nM) treated DU145 cells; Lane 5 and 6 represents untreated and DTX (40nM) treated LNCaP cells; Lane 7 and 8 represents untreated and DTX (40nM) treated PC3 cells. Images for lane 3-8 were cropped and used for Figure 3C.

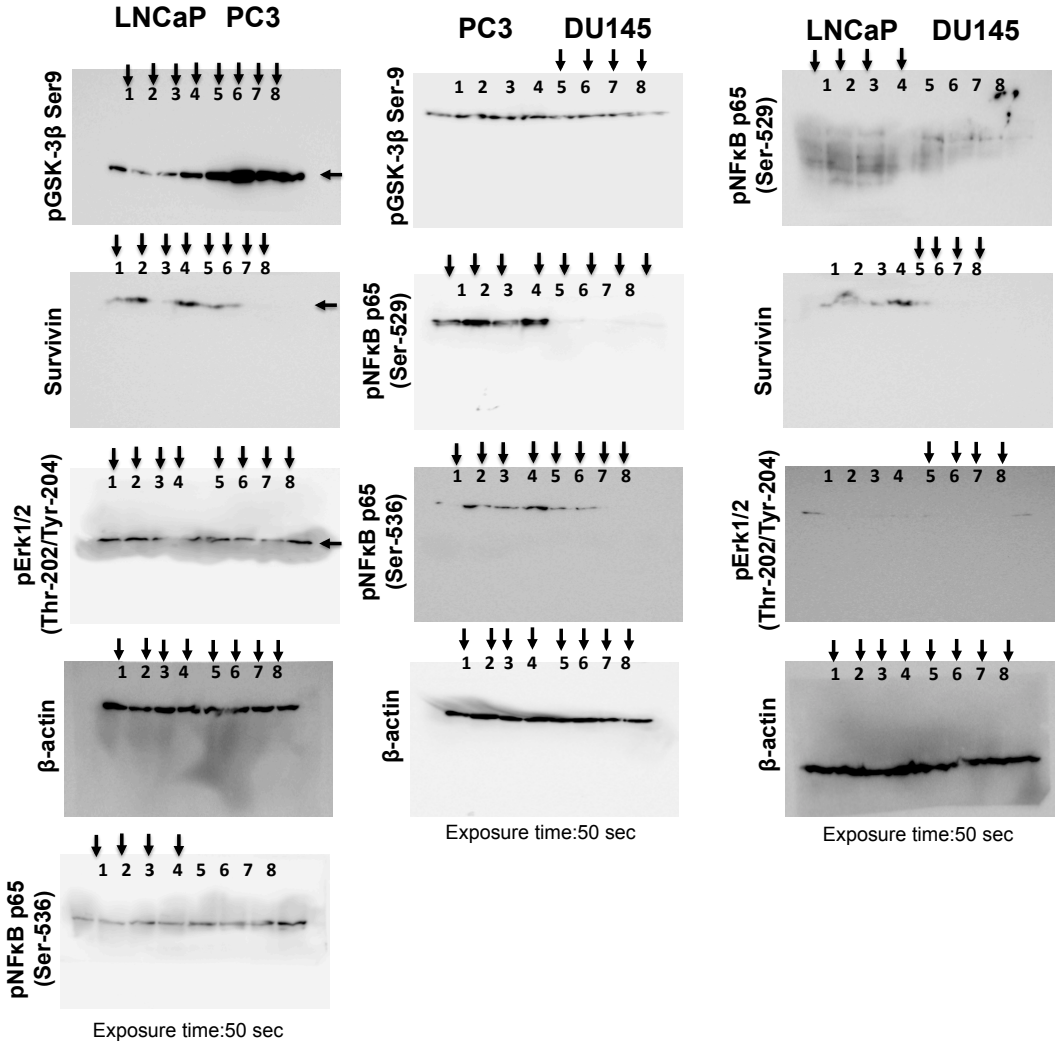
**Docetaxel induced NF-κB activation in prostate cancer cells.**




**Supplementary figure 3.** Western blot showing changes in phosphorylation status of NFkB Ser-529 in prostate cancer cells treated with DTX (40uM). Lane 1 and 2 represents untreated and DTX (40nM) treated PC3 cells; Lane 3 and 4 represents untreated and DTX (40nM) treated LNCaP cells; Lane 5 and 6 represents untreated and DTX (40nM) treated DU145 cells. Images for lane 1-6 were cropped and used for Figure 3D.

**Effect of CXCL16 treatment on phosphorylation and expression of signaling molecules in prostate cancer cells**

The blots were stripped using Restore PLUS western blot stripping (Thermo Fisher) buffer and re-probed for different protein.




## [A]

Lane 1:LNCaP Untreated15 min
Lane 2:LNCaP CXCL16 treated 15 min
Lane 3:LNCaP Untreated 30 min
Lane 4:LNCaP CXCL16 treated 30 min
Lane 5:PC3 Untreated 15 min
Lane 6:PC3 CXCL16 treated 15 min
Lane 7:PC3 Untreated 30 min
Lane 8:PC3 CXCL16 treated 30 min

## [B]

Lane 1:LNCaP Untreated 15 min
Lane 2:LNCaP CXCL16 treated 15 min
Lane 3:LNCaP Untreated 30 min
Lane 4:LNCaP CXCL16 treated 30 min
Lane 5:PC3 Untreated 15 min
Lane 6:PC3 CXCL16 treated 15 min
Lane 7:PC3 Untreated 30 min
Lane 8:PC3 CXCL16 treated 30 min

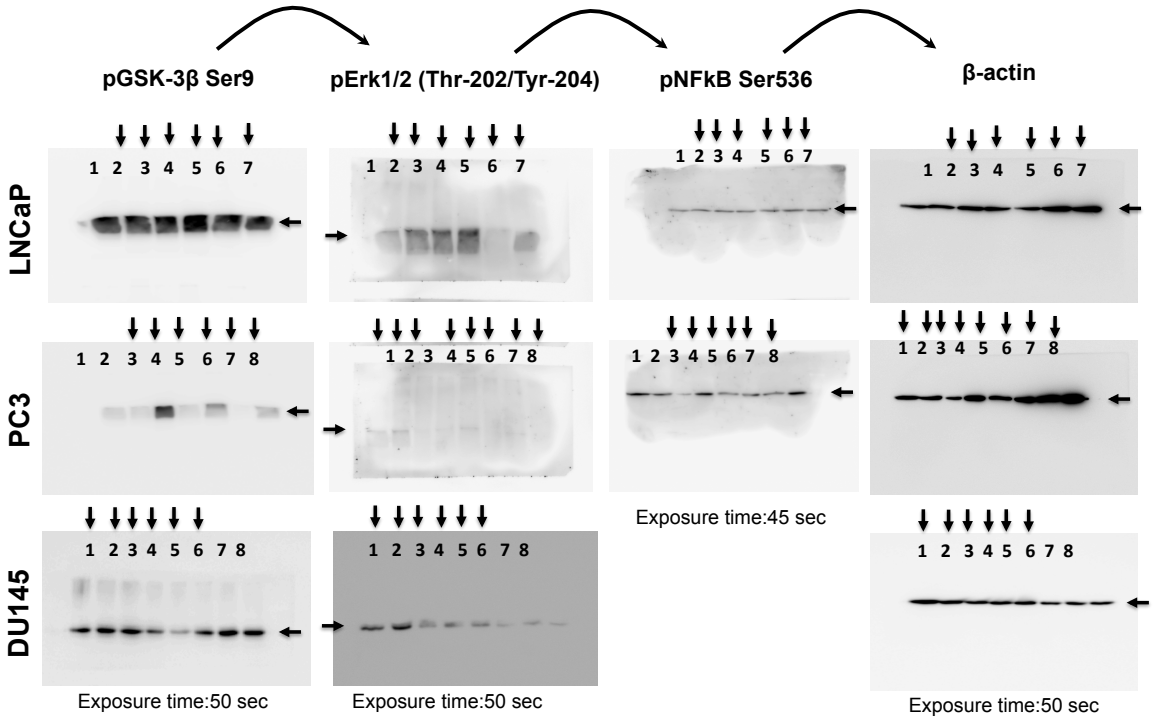
## [C]

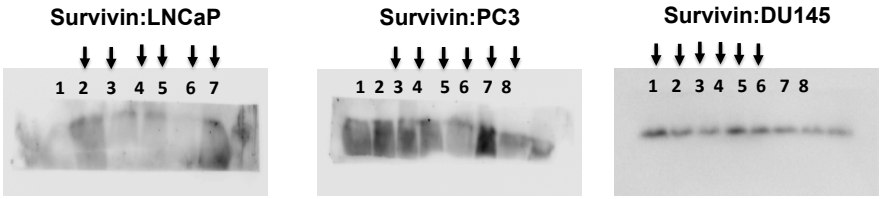
Lane 1:LNCaP Untreated 15 min
Lane 2:LNCaP CXCL16 treated 15 min
Lane 3:LNCaP Untreated 30 min
Lane 4:LNCaP CXCL16 treated 30 min
Lane 5:DU145 Untreated 15 min
Lane 6:DU145 CXCL16 treated 15 min
Lane 7:DU145 Untreated 30 min
Lane 8:DU145 CXCL16 treated 30 min

**Supplementary figure 4.** Western blot showing changes in phosphorylation status of GSK-3β Ser-536, pERK1/2 (Thr-202/Tyr-204), pNFkB p65 Ser529/Ser536 and expression of survivin in prostate cancer cells following 15 min and 30 min of CXCL16 treatment. **Panel-A:** Lane 1 and 2 represents untreated and CXCL16 treated LNCaP cells after 15 min time interval; Lane 3 and 4 represents untreated and CXCL16 treated LNCaP cells after 30 min time interval; Lane 5 and 6 represents untreated and CXCL16 treated PC3 cells after 15 min time interval; Lane 7 and 8 represents untreated and CXCL16 treated PC3 cells after 30 min time interval. **Panel-B:** Lane 1 and 2 represents untreated and CXCL16 treated PC3 cells after 15 min time interval; Lane 3 and 4 represents untreated and CXCL16 treated PC3 cells after 30 min time interval; Lane 5 and 6 represents untreated and CXCL16 treated DU145 cells after 15 min time interval; Lane 7 and 8 represents untreated and CXCL16 treated DU145 cells after 30 min time interval. **Panel-C:** Lane 1 and 2 represents untreated and CXCL16 treated LNCaP cells after 15 min time interval; Lane 3 and 4 represents untreated and CXCL16 treated LNCaP cells after 30 min time interval; Lane 5 and 6 represents untreated and CXCL16 treated DU145 cells after 15 min time interval; Lane 7 and 8 represents untreated and CXCL16 treated DU145 cells after 30 min time interval. Images for respective lanes for pGSK-3β, survivin, pERK1/2 and pNFkB p65 Ser529/Ser536 levels in PCa cells were cropped (shown by arrow) and used in Fig 4B-E. Images from corresponding β-actin bands were cropped and used in the respective blot images.

**Effect of CXCL16 treatment on phosphorylation and expression of signaling molecules in prostate cancer cells**

The blots were stripped using Restore PLUS western blot stripping (Thermo Fisher) buffer.




**LNCaP**
Lane 1:Sample X
Lane 2: Untreated 1hour
Lane 3:CXCL16 1 hour
Lane 4:Untreated 2 hour
Lane 5:CXCL16 2 hour
Lane 6:Untreated 4 hour
Lane 7:CXCL16 4 hour

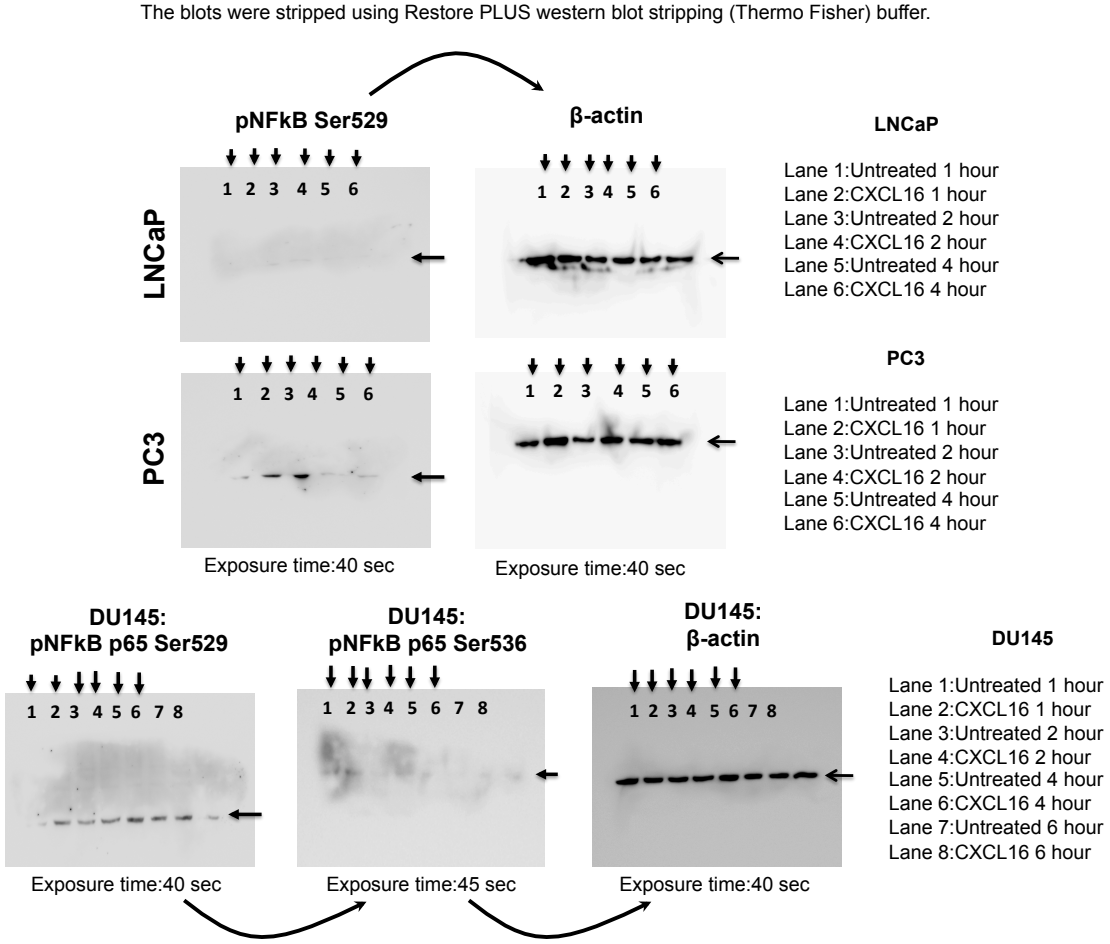
**PC3**
Lane 1:Untreated 30 min
Lane 2:CXCL16 30 min
Lane 3:Untreated 1 hour
Lane 4:CXCL16 1 hour
Lane 5:Untreated 2 hour
Lane 6:CXCL16 2 hour
Lane 7:Untreated 4 hour
Lane 8:CXCL16 4 hour

**DU145**
Lane 1:Untreated 1 hour
Lane 2:CXCL16 1 hour
Lane 3:Untreated 2 hour
Lane 4:CXCL16 2 hour
Lane 5:Untreated 4 hour
Lane 6:CXCL16 4 hour
Lane 7:Sample X
Lane 8:Sample X

The original blots were cut at 25kDa marker band and lower blots (with proteins <25kDa) was probed for survivin. Upper blots (with proteins >25kDa) were probed for pGSK-3β Ser-9, pERK1/2, pNFkB Ser536 and lower blots were probed for survivin.

**Supplementary figure 5.** Western blot showing changes in phosphorylation status of GSK-3β Ser-536, pERK1/2 (Thr-202/Tyr-204), pNFkB p65 Ser536 and expression of survivin in prostate cancer cells following CXCL16 treatment. For **LNCaP** cells: Lane 2 and 3 represents untreated and CXCL16 treated cells, respectively, after 1h time interval; Lane 4 and 5 represents untreated and CXCL16 treated cells, respectively, after 2h time interval; Lane 6 and 7 represents untreated and CXCL16 treated cells, respectively, after 4h time interval. Images for Lane 4 and 5 were cropped for pGSK-3β and used in Fig 4B, Lane 2 and 3 for pERK1/2 used in Fig 4D, Lane 6 and 7 for pNFkB Ser536 and used in Fig 4E, Lane 2 and 3 for Survivin and used in Figure 4F. Images from corresponding β-actin bands were cropped and used in the respective figures. For **PC3** cells: Lane 1 and 2 represents untreated and CXCL16 treated cells, respectively after 30 min time interval; Lane 3 and 4 represents untreated and CXCL16 treated cells, respectively, after 1h time interval; Lane 5 and 6 represents untreated and CXCL16 treated cells, respectively, after 2h time interval; Lane 7 and 8 represents untreated and CXCL16 treated cells, respectively, after 4h time interval. Images for Lane 5 and 6 were cropped for pGSK-3β and used in Fig 4B, Lane 1 and 2 for pERK1/2 used in Fig 4D, Lane 7 and 8 for pNFkB Ser536 and used in Fig 4E, Lane 5 and 6 for Survivin and used in Figure 4F. Images from corresponding β-actin bands were cropped and used in the respective figures. For **DU145** cells: Lane 1 and 2 represents untreated and CXCL16 treated cells, respectively after 1h time interval; Lane 3 and 4 represents untreated and CXCL16 treated cells, respectively, after 2h time interval; Lane 5 and 6 represents untreated and CXCL16 treated cells, respectively, after 4h time interval; Lane 7 and 8 represents untreated and CXCL16 treated cells, respectively, after 6h time interval. Images for Lane 5 and 6 were cropped for pGSK-3β and used in Fig 4B, Lane 1 and 2 for pERK1/2 used in Fig 4D, Lane 3 and 4 for Survivin and used in Figure 4F. Images from corresponding β-actin bands were cropped and used in the respective figures.

**Effect of CXCL16 treatment on phosphorylation and expression of signaling molecules in prostate cancer cells**




**Supplementary figure 6 .** Western blots showing changes in phosphorylation status of pNFkB p65 Ser529 in prostate cancer cells treated with CXCL16. Lane 1 and 2 represents untreated and CXCL16 (100ng/ml) treated PCa cells after 1h time interval; Lane 3 and 4 represents untreated and CXCL16 (100ng/ml) treated PCa cells after 2h time interval; Lane 5 and 6 represents untreated and CXCL16 (100ng/ml) treated PCa cells after 4h time interval, for the three PCa cell lines. For DU145 cells, Lane 7 and 8 represents untreated and CXCL16 (100ng/ml) treated cells after 6h time interval. Images for lane 1 and 2 were cropped and used for Figure 4C. Blot for DU145 cells was stripped using RestorePLUS western blot stripping buffer and reprobed for pNFkB p65 Ser536. Lane 3 and 4 were cropped and used for Figure 4E. Images from corresponding β-actin bands were cropped and used in the respective blot figure for each cell line.