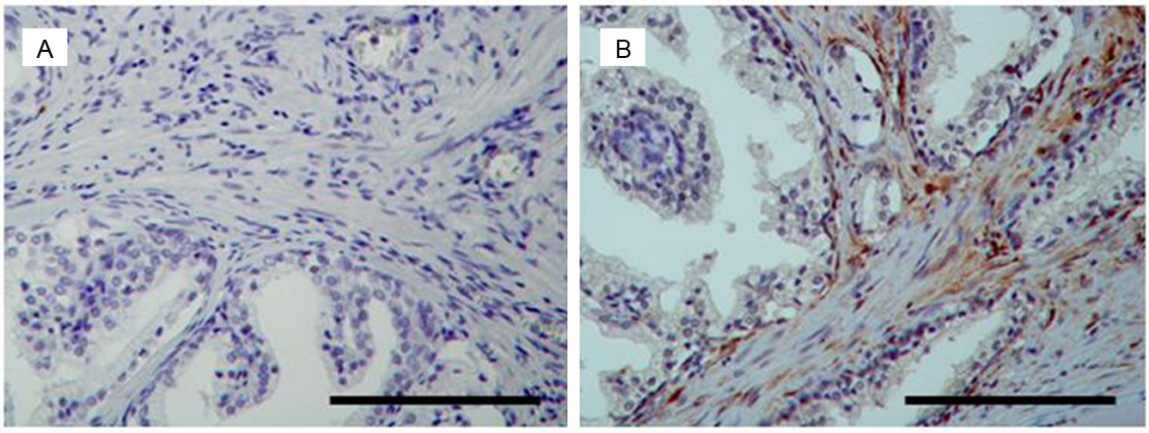
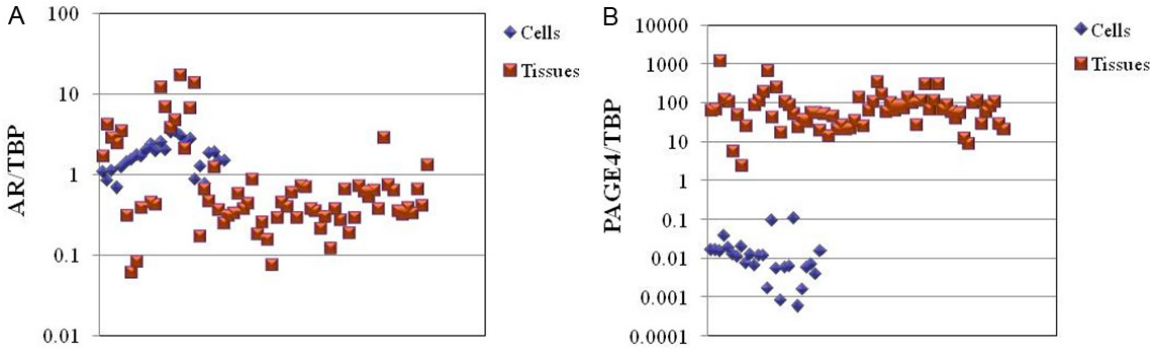
Supplemental Table 1. Clinical characteristics of patients with PCa and normal controls

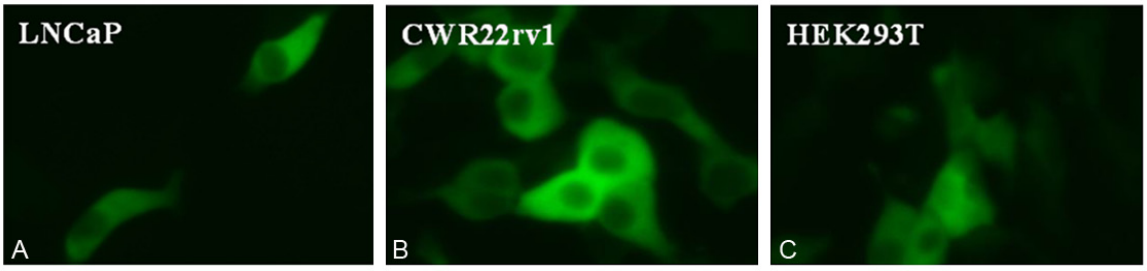
		Prostate cancer	Nor Normal control
Number		38	5
Median Age (years)		59 (43-70)	57 (45-67)
Gleason Score	≤6	22	
	>6	16	
Median PSA (ng/mL)		7.3 (3.5-390.7)	
Tumor Stage	1c	9	
	2a	15	
	2b	14	



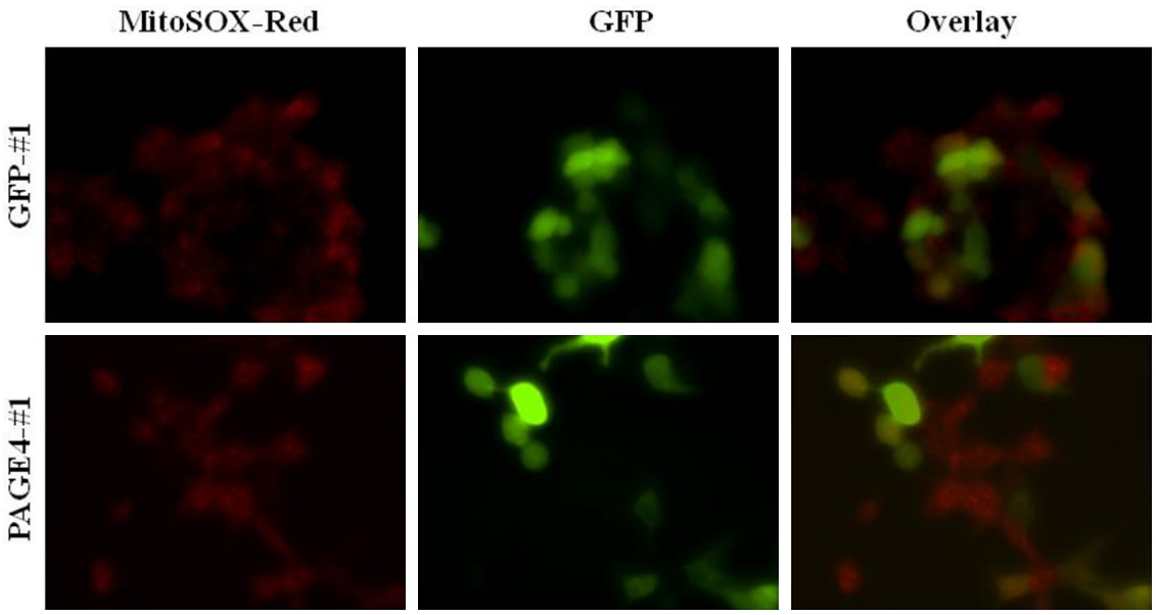
Supplemental Figure 1. Immunohistochemistry (IHC) analysis of PAGE4 in prostate diseases. (A) PAGE4 antibody WER2 was blocked with (A) or without (B) immunizing peptide and then was used for IHC staining in tissue specimen of benign prostatic hyperplasia (BPH). Scale bars in all panels, 200 μm.



Supplemental Figure 2. PAGE4's expression is compared between the human prostate tissue samples (n=68, samples are same to those used in **Figure 1A** and **1B**) and the prostatic cells lines (n=26), which include cancer cells (PC-3, DU-145, LNCaP, LN96, CWR22rv1, LAPC4), BPH cells (267B1, BRF55, BPH-1), normal prostate cells (PrEc), and normal prostate stromal cells (PrSc), as well as some of those cells under a certain stress conditions (**Table 2**). A: mRNA expression levels of AR are similar in the prostatic tissues samples to that in the cell lines. B: mRNA expression levels of PAGE4 is much lower in the cell lines than that in the tissue samples.



Supplemental Figure 3. PAGE4 localization in cells. pCMV6-PAGE4-GFP was transfected into LNCaP (A), CWR22rv1 (B) or HEK293T (C) cells, PAGE4-GFP location were observed under fluorescence microscope 48 h post-transfection.



Supplemental Figure 4. CWR22rv1 cells were transfected with either GFP (GFP-#1) or GFP-tagged PAGE4 (PAGE4-#1), and then cultured in the medium with glucose supplement for 48 hr. Cells were stained with MitoSOX™ Red and observed under fluorescence microscopy.