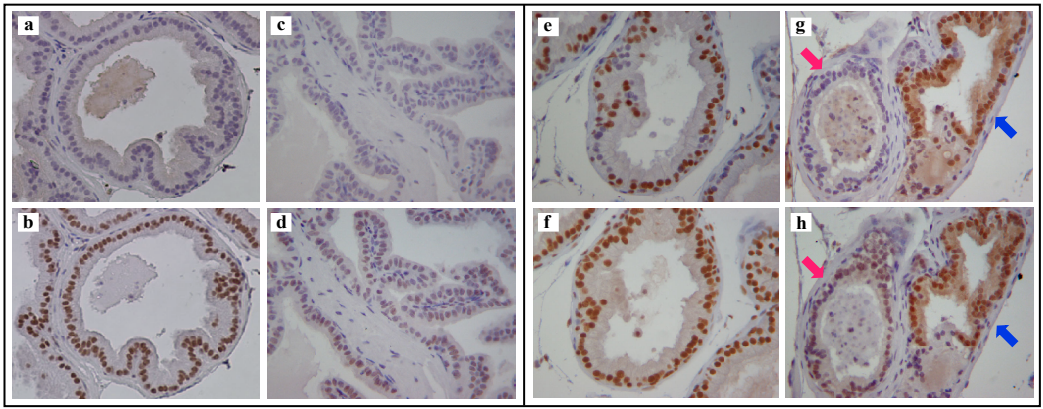

Supplemental Figure 2. Expression of the AR transgene is not affected by castration in R26hAR$^{L/wt}$:Osr1-Cre+mice. Four pairs of 12-week-old R26hAR$^{L/wt}$:Osr1-Cre- and R26hAR$^{L/wt}$:Osr1-Cre+male mice were examined the effect of castration on AR transgene expression. Two mice from each genotype were castrated and sacrificed after 7 days with intact counterparts. Adjacent slides were stained with either the antibody reacting with both the human and mouse AR proteins (h/mAR Ab) or the antibody only reacting with the human AR protein (hAR Ab). The sections were lightly counterstained with haematoxylin. Representative imagines were shown. Expression of endogenous mouse AR protein is observed in prostate tissues of both R26hAR$^{L/wt}$:Osr1-Cre- (**B**) and R26hAR$^{L/wt}$: Osr1-Cre+ (**F**) intact mice. However, transgenic AR expression was only detected in R26hARL$^{L/wt}$:Osr1-Cre+ mice (**E**) but not in R26hARL$^{L/wt}$:Osr1-Cre- mice (**A**). Endogenous mouse AR expression was significantly reduced in both castrated mice (**D & H**, left gland with the red arrow). However, transgenic AR expression appeared unchanged between the castrated and intact R26hAR$^{L/wt}$:Osr1-Cre+ mice (**E** versus **G**, the blue arrow). Particularly, the contrasting staining between two adjacent glands in the same image (red versus blue arrows, **G & H**) clearly demonstrated that AR transgene expression is resistant to castration.