

## **Supplementary Figure S5**

- A. AR essentiality mediated through CRISPR/Cas9 across various cell lines. Each dot indicates a prostate cancer cell line. VCaP cell line was the only prostate cancer line included in Figure 5A included in the CRISPR/Cas9 screen, it is labeled with the name of the cell line and color-coded according to similarity to prostate cancer patients. The red dashed line corresponds to essentiality score = 0 threshold.
- B. UpSet plot showing the intersection of transposable element families enriched in reprogrammed (REP) prostate cancer patients and in AR-dependent or independent prostate cancer cell lines. Note that 68 transposable element families are commonly enriched in AR-dependent prostate cancer cell lines and reprogrammed patients, leading us to name AR-dependent prostate cancer lines as reprogrammed prostate cancer lines.
- C. Boxplot displaying the reprogramming score in prostate cancer cell lines.
- D. Unsupervised hierarchical clustering (complete linkage) of prostate cancer cell lines based on presence/absence of H3K27ac regions. Note that the clustering does not match the one obtained using transposable elements enrichment.
- E. Boxplot displaying the repressive score in prostate (cancer) cell lines.
- F. Tigger3a enrichment across H3K9me3 profiles of prostate (cancer) cell lines. Boxplots show differential deviation Z-scores in prostate (cancer) cell lines.
- G. dCas9-KRAB expression levels in clonal prostate cancer cell lines. Western blot was performed on whole extracts, showcasing variable dCas9-KRAB expression across prostate cancer cell lines and among different clones of the same cell line. α-tubulin (α-tub) was used as leading control.