

Table 1. Tissues and cells where the different AR isoforms and splice variants have been found to be expressed

| | AR isoform/variant | | | | | |
|--|---|---|--|--|---|---|
| | AR45 | AR8 | ARv567es | ARV1 | ARV7 | AR23 |
| Tissues, cells and cell lines expressed | Prostate, Testis, Uterus, Breast, Heart, Lung, Trachea, Liver, Kidney and Muscle LNCaP cells, Cardiomyocytes, HepG2 cells, and hepatocellular carcinoma cells | Benign and malignant prostate cells, LNCaP, C4-2 and C4-2B cells | Normal and malignant prostate epithelial cells, LuCap xenografts | Prostate cancer cells from CRPC patients Primary tumors and bone metastases | Normal (low levels) and malignant (higher levels) prostate epithelial cells, prostate cancer cells from CRPC models and CRPC patients, VCaP and Myc-CaP cells, LuCap xenografts | Metastatic prostate cancer after anti-androgen treatment |
| Function | Inhibits AR function by the formation of AR-AR45 heterodimers | Primarily localized at the plasma membrane Its over-expression promotes association of Src and AR with EGF receptor | Constitutively active Increases the expression of AR | Constitutive and ligand independent activation Confers castration resistant growth | Constitutive and ligand independent activation Confers castration resistant growth | No nuclear localization and activation of androgen responsive reporters Increases AR activation |
| References | 8, 15, 16 | 14 | 12, 10 | 17, 9, 18 | 11, 12 | 13, 19 |