

Table S1. AR mutations identified in the ligand binding domain (LBD) or the DNA binding domain (DBD).

AR mutant	AR region	Identified in	Reference	Primers 5'-3'
T576A	DBD	PCa patient relapsing after leuporelin and flutamide treatment and with bone metastasis	1, 2	FW: GTCACATATGGAGCTCTCGCATGTGGAAGCTGCAAG RV: CTTGCAGCTTCCACATGCGAGAGCTCCATAGTGAC
K581R	DBD	Metastatic specimens of PCa patients	2	FW: CTCACATGTGGAAGCTGCAGGGTCTTCTTCAAAAGAG RV: CTCTTTTGAAGAAGACCCTGCAGCTTCCACATGTGAG
A587V	DBD	Metastatic specimens of PCa patients	2	FW: GGTCTTCTTCAAAAGAGTCGCTGAAGGGAAACAGA RV: TCTGTTTCCCTTCAGCGACTCTTTTGAAGAAGACC
A588S	DBD	Metastatic specimens of PCa patients	2	FW: GGTCTTCTTCAAAAGAGCCAGTGAAGGGAAACAGAAGTAC RV: GTACTTCTGTTTCCCTTCACTGGCTCTTTTGAAGAAGACC
L595M	DBD	Liver metastases of patient treated with bicalutamide	3	FW: AAGGGAAACAGAAGTACATGTGCGCCAGCAGAAA RV: TTTCTGCTGGCGCACATGTACTTCTGTTTCCCTT
C620Y	DBD	PCa patient with lymph node metastasis	2, 4	FW: TCTTGTCGCTCTTCGGAAATATTATGAAGCAGGGATGAC RV: GTCATCCCTGCTTCATAATATTTCCGAAGACGACAAGA
R630Q	Hinge	PCa patient with lymph node metastasis	5, 6	FW: GATGACTCTGGGAGCCAGAGCTGAAGAACTTG RV: CAAGTTTCTTCAGCTTCTGGGCTCCAGAGTCATC
K631T	Hinge	PCa patient before ADT	5, 7	FW: ACTCTGGGAGCCCGACGCTGAAGAACTTG RV: CAAGTTTCTTCAGCGTCCGGGCTCCAGAGT
E666D	Hinge	Liver metastases of patient treated with bicalutamide	3	FW: AGAAGCTGACAGTGTACACATTGATGGCTATGAATGTC RV: GACATTTCATAGCCATCAATGTGTGACACTGTCAGCTTCT
Q671R	LBD	Primary tumor from PCa patient before ADT	7	FW: ATTGAAGGCTATGAATGTCGGCCCATCTTTCTGAATGTC RV: GACATTTCAGAAAGATGGGCCGACATTCATAGCCTTCAAT
G684A	LBD	Patient with localized PCa	8	FW: AAGCCATTGAGCCAGCTGTAGTGTGTGCTGG RV: CCAGCACACACTACAGCTGGCTCAATGGCTT
K721E	LBD	PCa patient with bone metastasis	9, 10	FW: GGTCAAGTGGGCCGAGGCCTTGCTGG RV: CCAGGCAAGGCCTCGGCCCACTTGACC
A722T	LBD	Patients with metastatic prostate cancer in relapse after orchiectomy or the administration of an LHRH agonist	11	FW: TCAAGTGGGCCAAGACCTTGCTTGCTTC RV: GAAGCCAGGCAAGGTCTTGCCCCACTTGA
L723F	LBD	Patient with localized PCa	12, 13	FW: AAGTGGGCCAAGGCCTTCCCTGGCTTCCGCA RV: TGCGGAAGCCAGGGAAGGCCTTGCCCCACTT
G725D	LBD	Patients with metastatic prostate cancer in relapse after orchiectomy or the administration of an LHRH agonist	11	FW: CCAAGGCCTTGCTGACTTCCGCAACTTACA RV: TGTAAGTTGCGGAAGTCAGGCAAGGCCTTG
L745F	LBD	Latent carcinomas from Japanese males	14	FW: GTACTCCTGGATGGGGTTCATGGTGTGGCCAT RV: ATGGCAAACACCATGAACCCCATCCAGGAGTAC

A749T	LBD	Metastatic specimens of PCa patients	2, 15	FW: GATGGGGCTCATGGTGTTTACCATGGGCTG RV: CAGCCCATGGTAAACACCATGAGCCCCATC
A749V	LBD	Latent carcinomas from Japanese males	14	FW: ATGGGGCTCATGGTGTTTGTTCATGGGCTGGCGAT RV: ATCGCCAGCCCATGACAAACACCATGAGCCCCAT
M750I	LBD	Latent carcinomas from Japanese males and orchiectomy-Bicalutamide-Refractory Prostate Cancer	14, 16	FW: GCTCATGGTGTTTGCCATAGGCTGGCGATC RV: GATCGCCAGCCTATGGCAAACACCATGAGC
G751S	LBD	Latent carcinomas from Japanese males	14	FW: CATGGTGTTTGCCATGAGCTGGCGATCCTTCAC RV: GTGAAGGATCGCCAGCTCATGGCAAACACCATG
F755L	LBD	Latent carcinomas from Japanese males	14	FW: CCATGGGCTGGCGATCCTTAACCAATGTCAACTC RV: GAGTTGACATTGGTTAAGGATCGCCAGCCCATGG
T756A	LBD	Latent carcinomas from Japanese males	14	FW: GGCTGGCGATCCTTCGCCAATGTCAACTCCA RV: TGGAGTTGACATTGGCGAAGGATCGCCAGCC
N757D	LBD	PCa tumors from bone-marrow biopsies after ADT withdrawal	17	FW: CTGGCGATCCTTCACCGATGTCAACTCCAGGAT RV: ATCCTGGAGTTGACATCGGTGAAGGATCGCCAG
V758A	LBD	Metastatic specimens of PCa patients	2	FW: CGATCCTTCACCAATGCCAACTCCAGGATGCTC RV: GAGCATCCTGGAGTTGGCATTGGTGAAGGATCG
V758I	LBD	Patients with local tumor recurrence	18	FW: TGGCGATCCTTCACCAATATCAACTCCAGGATGC RV: GCATCCTGGAGTTGATATTGGTGAAGGATCGCCA
S760P	LBD	Latent carcinomas from Japanese males	14	FW: CCTTCACCAATGTCAACCCCAGGATGCTCTACTTC RV: GAAGTAGAGCATCCTGGGGTTGACATTGGTGAAGG
Y764C	LBD	Latent carcinomas from Japanese males	14	FW: CTCCAGGATGCTCTGCTTCGCCCCGTGATC RV: GATCAGGGGCGAAGCAGAGCATCCTGGAG
S783N	LBD	Primary tumor from PCa patient before ADT	7	FW: TGCACAAGTCCCGGATGTACAACCAAGTGTGTCC RV: GGACACACTGGTTGTACATCCGGGACTTGTGCA
S792P	LBD	Primary tumor from PCa patient before ADT	7	FW: CCGAATGAGGCACCTCCCTCAAGAGTTTGGATG RV: CATCCAAACTCTTGAGGGAGGTGCCTCATTCCG
Q799E	LBD	Prostate carcinoma before treatment	19	FW: CAAGAGTTTGGATGGCTCGAGATCACCCCCAGGAATTC RV: GAATTCCTGGGGGGTGATCTCGAGCCATCCAAACTCTTG
I800T	LBD	Patient with localized PCa	12	FW: AGAGTTTGGATGGCTCCAAACCACCCCCAGG RV: CCTGGGGGGTGGTTTGGAGCCATCCAAACTCT
R847G	LBD	Metastatic specimens of PCa patients	2	FW: ATCGTATCATTGCATGCAAAGGAAAAAATCCCACATCCTGC RV: GCAGGATGTGGGATTTTTTCCTTGCATGCAATGATACGAT
S866P	LBD	Metastatic specimens of PCa patients	2	FW: CCAAGCTCCTGGACCCCGTGCAGCCTATT RV: AATAGGCTGCACGGGGTCCAGGAGCTTGG
V867M	LBD	Patients with local tumor recurrence and latent carcinomas	14, 18	FW: AGCTCCTGGACTCCATGCAGCCTATTGCG RV: CGCAATAGGCTGCATGGAGTCCAGGAGCT
E873Q	LBD	PCa patient after cyproterone acetate and chemotherapy	20	FW: CGTGCAGCCTATTGCGAGACAGCTGCATCA RV: TGATGCAGCTGTCTCGCAATAGGCTGCACG

D880G	LBD	PCa tumors from bone-marrow biopsies after ADT withdrawal	17	FW: GCTGCATCAGTTCACCTTTGGCCTGCTAATCAAGTCAC RV: GTGACTTGATTAGCAGGCCAAAAGTGAAGTGCAGC
L881Q	LBD	Patients with metastatic prostate cancer in relapse after orchiectomy or the administration of an LHRH agonist	11	FW: CATCAGTTCACCTTTGACCAGCTAATCAAGTCACACATG RV: CATGTGTGACTTGATTAGCTGGTCAAAAGTGAAGTGCAGC
M887I	LBD	PCa patient after orchiectomy and bicalutamide	20	FW: ACCTGCTAATCAAGTCACACATAGTGAGCGTGGAC RV: GTCCACGCTCACTATGTGTGACTTGATTAGCAGGT
D891N	LBD	PCa patient after LHRH agonist	21	FW: CACACATGGTGAGCGTGAACCTTTCCGGAAATGATG RV: CATCATTTCCGGAAAGTTCACGCTCACCATGTGTG
A897T	LBD	Patients with metastatic prostate cancer in relapse after orchiectomy or the administration of an LHRH agonist	11	FW: GGACTTTCCGGAAATGATGACGGAGATCATCTCTGTGCAAG RV: CTTGCACAGAGATGATCTCCGTCATCATTTCCGGAAAGTCC
Q903R	LBD	Patients with metastatic prostate cancer in relapse after orchiectomy or the administration of an LHRH agonist	11	FW: GGCAGAGATCATCTCTGTGAGAGTGCCCAAGATCCTTTCT RV: AGAAAGGATCTTGGGCACTCTCACAGAGATGATCTCTGCC
G910E	LBD	Latent carcinomas from Japanese males	14	FW: GCCCAAGATCCTTTCTGAGAAAGTCAAGCCCATCT RV: AGATGGGCTTGACTTTCTCAGAAAGGATCTTGGGC
K911R	LBD	PCa patient after refractory to hormone therapy	22	FW: GCCCAAGATCCTTTCTGGGAGAGTCAAGCCCATC RV: GATGGGCTTGACTCTCCAGAAAGGATCTTGGGC
Q920R	LBD	Metastatic specimens of PCa patients	2	FW: ATCTATTTCCACACCCGGTGAAGGATCCACTAGT RV: ACTAGTGGATCCTTCACCGGGTGTGGAATAGAT

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