Supplemantary Material

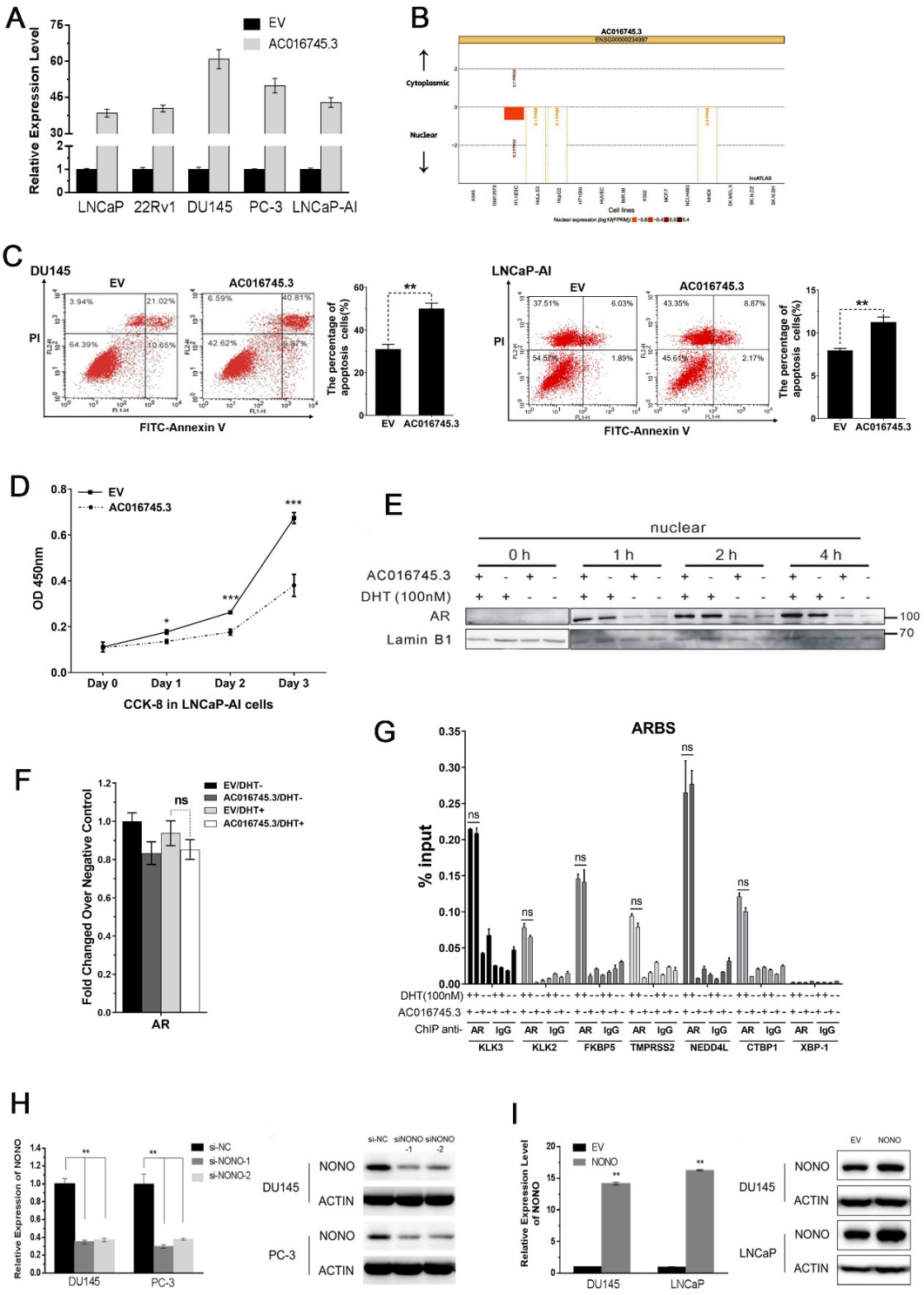

Figure S1 (A) The transfection efficiency of high-expression plasmid pcDNA3.1- *AC016745.3* in prostate cancer cell lines. (B) The LncATLAS database was used to analyze the subcellular localization of *AC016745.3* in each cell line. (C) After highly expressing *AC016745.3* in prostate cancer cell lines DU145 and LNCaP-AI, stained with Annexin V/PI, and detected the changes of early and late apoptosis by FACScalibur flow cytometry. (D) After highly expressing *AC016745.3* in LNCaP-AI, the cell growth rate changes

were detected using CCK-8 Kit. (E) Western blot was used to detect AR entry into the nucleus after separation of nucleus and cytoplasm in LNCaP cells transfected with *AC016745.3* and treated with 10 nM DHT in time series of 0, 1, 2, and 4 h. Lamin B1 was used as a reference to the nucleus. (F) RT-PCR showed expression level of AR in LNCaP cells transfected with *AC016745.3* and treated with DHT. (G) ChIP-PCR assay detects the combination of AR and its ARE elements (*KLK3*, *KLK2*, *FKBP5*, *TMPRSS2*, *NEDD4L*, *CTBP1*, *XBP-1*) in LNCaP cells transfected with *AC016745.3* and treated with DHT. The result is the percentage of DNA in the input. (H-I) The efficiency of small interfering RNA of NONO and high-expression plasmid pcDNA3.1-NONO were confirmed by qRT-PCR and Western blot.

Table S3. siRNA sequences used in knockdown experiments.

Name	Sequence（5′to 3′）
si-NC	UUCUCCGAACGUGUCACGUTT
si-AR-357	GGAGCUCUCACAUGUGGAATT
si-AR-544	GACAGUGUCACACAUUGAATT
si-NONO-1	CCUAGCGGAGAUUGCCAAATT
si-NONO-2	GCUCCUUUGAGUAUGAAUATT

Table S4. Primers used in qPCR.

Name	Sequence（5′to 3′）
β-actin-F	CCTCTCCCAAGTCCACACAG
β-actin-R	GGGCACGAAGGCTCATCATT
AC016745.3-F	GGTGACGAAAATTCTACATTGCT
AC016745.3-R	ACCTGGCTGGTGTCCTCTG
AR-F	GCCTTGCTCTCTAGCCTCAA
AR-R	GGTCGTCCACGTGTAAGTTG
RP11-1023L17.1-F	GATTTACTTTTGGGATACACTCATCAT
RP11-1023L17.1-R	ACAGGTGACTTCATCTTGGATTT
KLK2-F	ATCGAACCAGAGGAGTTCTTG
KLK2-R	CCCTTTCCCCTCCAGATGTT
KLK3-F	GTGCTTGTGGCCTCTCGT
KLK3-R	CAGCAAGATCACGCTTTTGT
TMPRSS2-F	ACTGGCTCCTGACTTAA
TMPRSS2-R	TTATGGCACTTGGCAATG
NKX3.1-F	CAGAGACCGAGCCAGAAAGG
NKX3.1-R	CTGAGTGTGGGAGAAGGCAG
KLK4-F	GAAGTGAGTGCAGAGCTCCTA
KLK4-R	GTTAGCGAGCAAGGGTCTGT
IRF1-F	GGCCCTGACTCCAGCTACAA
IRF1-R	TACCCCTTCCCATCCACGTT
PBX1-F	CCAACTCGGCTGGTGGATAC
PBX1-R	TGTACATCTGACTGGCTGCG
SNAI2-F	TTCGGACCCACACATTACCT
SNAI2-R	GAAAAAGGCTTCTCCCCCGTG

Name	Sequence（5′to 3′）
CHK1-F	TCTGCTCCTCTAGCTCTGCT
CHK1-R	TGGGAGACTCTGACACACCA
RAD17-F	TGGTGGGTCGGCTAGGAATA
RAD17-R	ACCATGAATTCACTTGCTCCT
MYC-F	TGGAAAACCAGCCTCCCG
MYC-R	TTCTCCTCCTCGTCGCAGTA
SREBP-1a-F	GCTCCCTAGGAAGGGCCGTA
SREBP-1a-R	CGCCGACTTCACCTTCGAT
USO1-F	AAGATCGACAGACGGGGAAG
USO1-R	AGGGCACATAAGCCTTGGAC
NONO-F	ACAGATGCAGTGAAGGCTC
NONO-R	CTCGTTCCTTGTGAAATTGCTG

Table S5. Primers used in ChIP-PCR.

Name	Sequence（5′to 3′）
ARE1-F	TACATCATAGACCTCCCAAACAG
ARE1-R	GGGAGAGGGACCATTATCTGGC
ARE2-F	CCCTAGGATAGATTTCTTGAAGA
ARE2-R	TTTTATTGTAGTTTTGGTTGCATAA
PSA enhancer-F	TGGGACAACTTGCAAACCTG
PSA enhancer-R	CCAGAGTAGGTCTGTTTTCAATCCA
miR-125b-F	TACAATTCCTGTGAAATGAGAGCAC
miR-125b-R	TTCTATGTGATAATGAAAAAAACCCTA
XBP1-promoter-F	TCTGGAAAGCTCTCGGTTTG
XBP1-promoter-R	AATCCCTGGCCAAAGGTACT
KLK2-F	TGTGTGCAGGAAGAGCGGGTGAA
KLK2-R	ACCTGACCCTCCATTCTAACTGGT
KLK3-F	TGGGACAACTTGCAAACCTG
KLK3-R	CCAGAGTAGGTCTGTTTTCAATCCA
FKBP5-F	ATTATCCGGAGAACCAAACG
FKBP5-R	ACATCCTTCCACCACAG
TMPRSS2-F	CAGGAGTGTACGGGAATGTGATGGT
TMPRSS2-R	GATTAGCCGTCTGCCCTCATTTGT
NEDD4L-F	CAACTTGGACTCGGCCAATC
NEDD4L-R	GTTACTGTTGGCGAGCTGAG
CTBP1-F	ACACCCAAGGTCCTCAG
CTBP1-R	TCCTTTGTTCACAGAGTCAG

Table S6. Primers used in Plasmid construction.

Name	Sequence（5′to 3′）
AC016745.3-clone-F	AGCTGGGAAAACGGC
AC016745.3-clone-R	ATAACAGAACCTATACTATAAAATGG
AC016745.3-T7-F	TAATACGACTCACTATAGGGAGCTGGGAAAACGGC
AC016745.3-T7-R	TAATACGACTCACTATAGGGATAACAGAACCTATACTATAAAATGG
NONO-clone-F	ATGCAGAGTAATAAAACTTTTAACTTGGA
NONO-clone-R	TTAGTATCGGCGACGTTTGTTTG