

Supplementary Information:

Supplementary Figures:

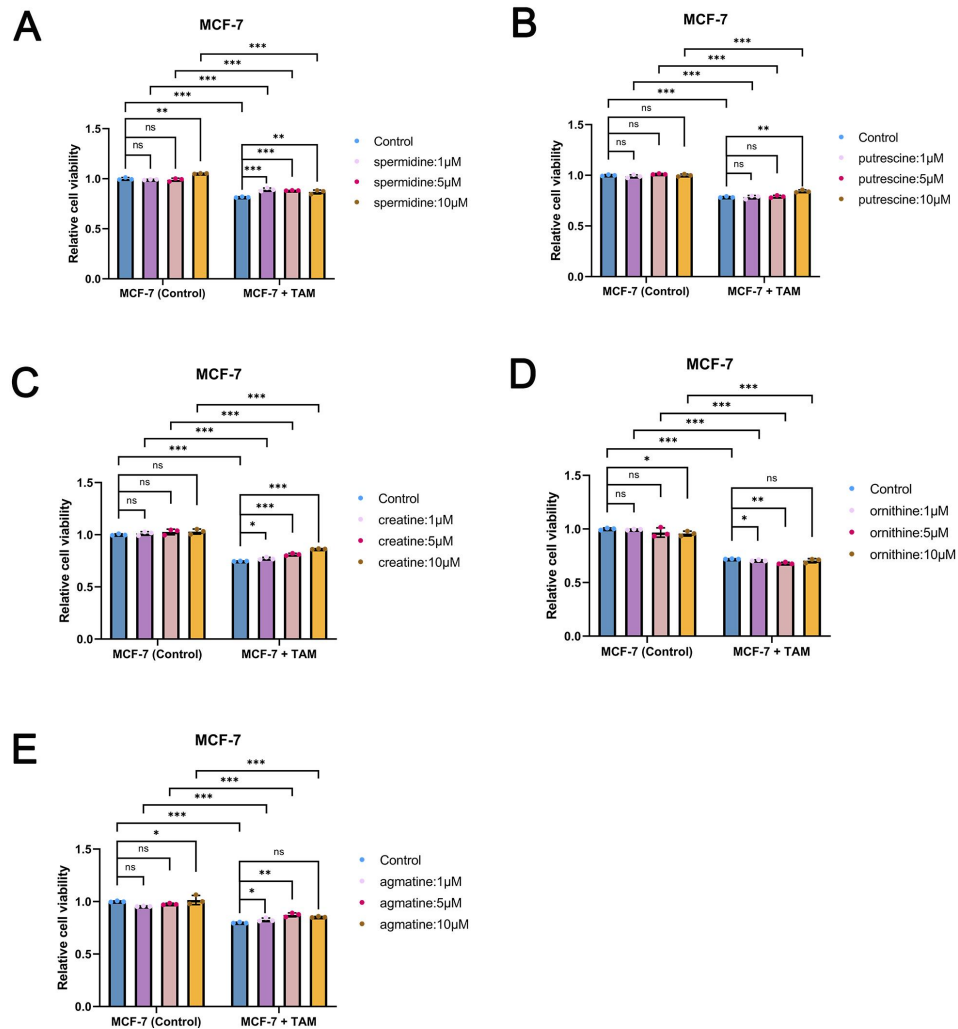


Fig. S1 CCK-8 assay detected the influence of spermidine (A), putrescine (B), creatine (C), ornithine(D), and agmatine (E) on cell viability of MCF-7 cells at different concentrations.

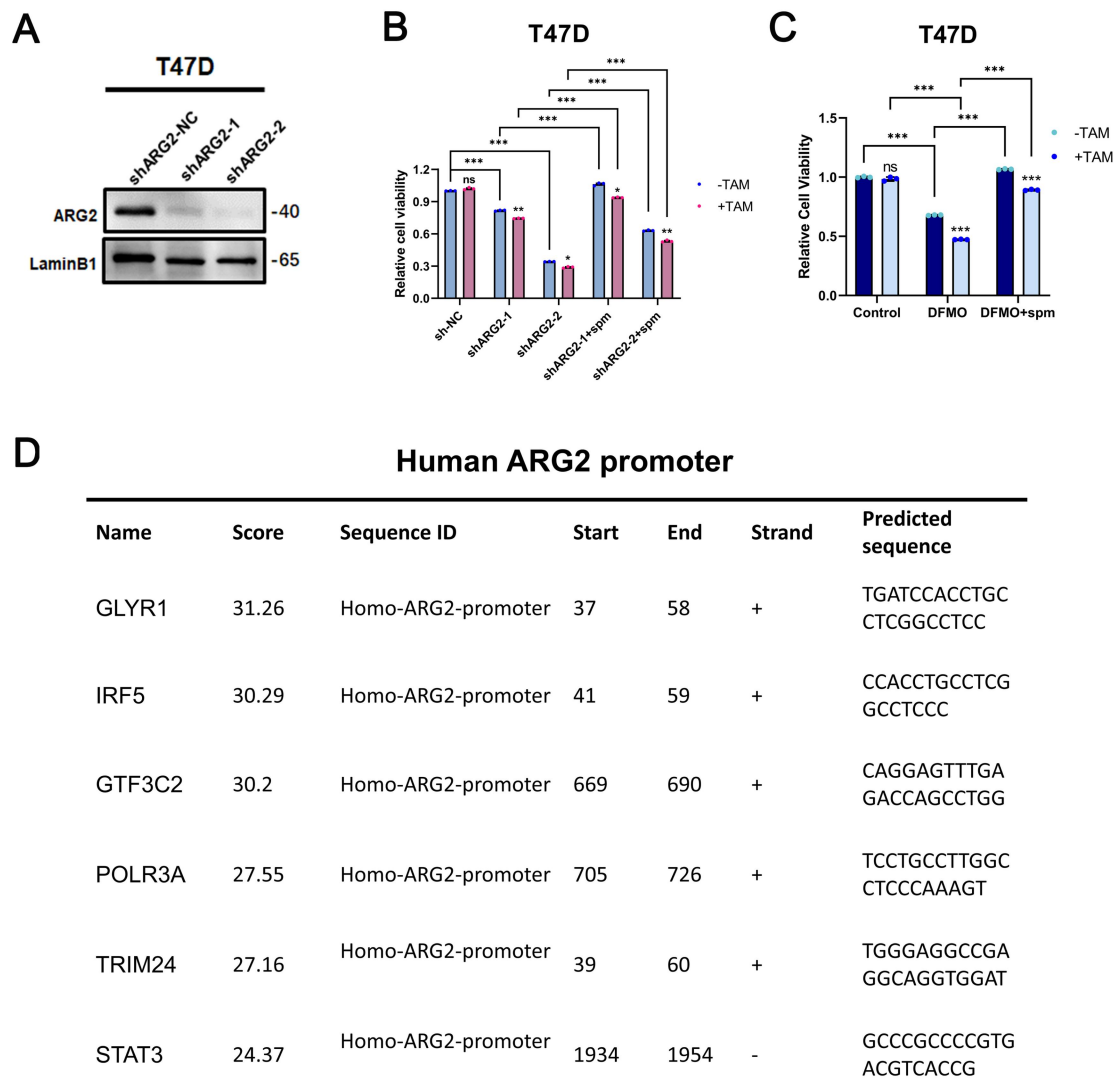


Fig. S2 (A) Wb analyzed ARG2 expression in T47D cells with or without ARG2 knockdown. (B) CCK-8 assay detected the effect of ARG2 knockdown or spermine on cell viability and tamoxifen sensitivity of T47D cells. (C) CCK-8 assay detected the effect of DFMO or spermine on cell viability and tamoxifen sensitivity of T47D cells. (D) The diagram of specific information of 6 kinds of predicted transcriptional factors that can combined with human ARG2 promoter.

A

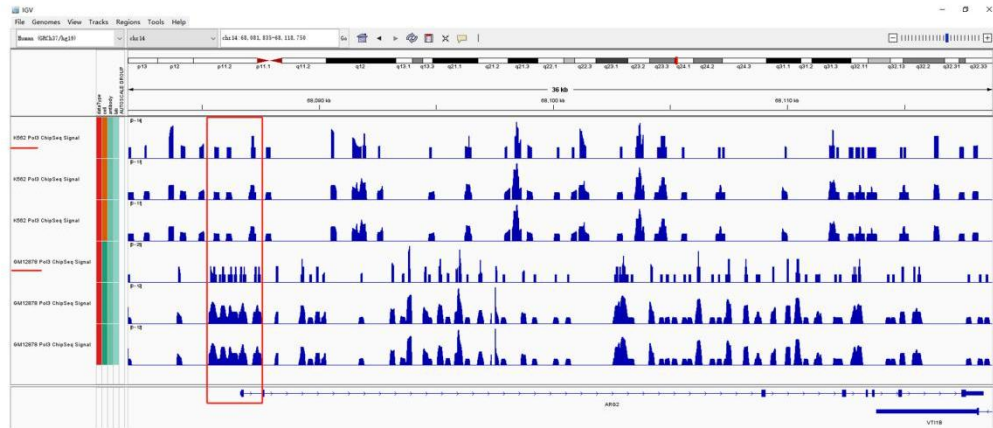


Fig. S3 IGV software analyze the publicly available ChIP-Seq data to confirm the transcriptional regulatory effect of POLR3A on ARG2 promoter.

Supplementary Table 1: Primer sequences

Primer name	Sequence (5'-3')
Human SLC7A1-F	GCCTGTGCTATGGCGAGTTT
Human SLC7A1-R	ACGCTTGAAGTACCGATGATGTA
Human NOS-F	TGATGGCGAAGCGAGTGAAG
Human NOS-R	ACTCATCCATACACAGGACCC
Human ADC-F	CTGCCAGTAAGATCATCTGCG
Human ADC-R	AGTCATCGGTAGCAATGCACA
Human AGMAT-F	CATTTTCATGGAGCGTGACTACAC
Human AGMAT-R	TCCTCCTCTTCGACTGTCTTTTG
Human GATM-F	CATCATTGGACCTGGTATTGTGC
Human GATM-R	GGATGATTGGTGTGAGGAGTA
Human GAMT-F	CGCCCATTGATGAGCATTGG
Human GAMT-R	GGCCTTTCAAGGGGATGACC
Human ARG2-F	ACCTGATAGTGAATCCACGCT
Human ARG2-R	CATGGGCATCAACCCAGAC
Human ODC1-F	TTTACTGCCAAGGACATTCTGG
Human ODC1-R	GGAGAGCTTTTAACCACCTCAG
Human SRM-F	GTGGTGGCCTATGCCTACTG
Human SRM-R	CTCCTGGAAGTTCGTGCTCG
Human SMS-F	TGGGCGGGTGAAACGATTAC
Human SMS-R	CCAAACTGCTTCGAGTGTAGAA
Human GLYR1-F	AGCGCAAACCTTAGCCTGTCTG
Human GLYR1-R	TCCGGGATGGTGAGATCCTTC
Human IRF5-F	CAGGTGAACAGCTGCCAGTA
Human IRF5-R	GGCCTTGAAGATGGTGTGTTGT
Human GTF3C2-F	CCACTGGTTCCTGGTCTCTTA
Human GTF3C2-R	GGACTTTTCGACCTCGTTTCTTAG
Human POLR3A-F	CTCGACCATAGGATGGGTACG
Human POLR3A-R	GGCCTAGACAGTCAGCCAAG
Human TRIM24-F	TGTGAAGGACACTACTGAGGTT
Human TRIM24-R	GCTCTGATACACGTCTTGCAG
Human STAT3-F	CAACAGATTGCCTGCATTGGA
Human STAT3-R	ATTTGTTGACGGGTCTGAAGTTGA
Human ACTB-F	CATGTACGTTGCTATCCAGGC
Human ACTB-R	CTCCTTAATGTCACGCACGAT

Supplementary Table 2: siRNA sequences

siRNA name	Sequence (5'-3')
siARG2#1	5 '-GAUCAAACCUUGUAUCUCUUU-3'
siARG2#2	5 '-UCAGAGAACUACAGGAUAAUU-3'
siARG2#3	5 '-GAACUAUGAUAUCCAGUAUUU-3'
siARG2#4	5'-CCUAUCGAGAAGGCAUGUATT-3'
siGLYR1#1	5'-GGAAAGAAGAGGGUGUCUUTT-3'
siGLYR1#2	5'-GGGUAAACGAUUCAGCAATT-3'
siIRF5#1	5'-cuGcAGAGAAuAAccuGAdTsdT-3'
siIRF5#2	5'-GCAGUUUAAAGAGCUUCAUUU-3'
siGTF3C2#1	5'-GGCACUGAAUCCAAUAAAUTT-3'
siGTF3C2#2	5'-GCACCCUCUACCGAAUAAATT-3'
siGTF3C2#3	5'-GCCCACUUCAAUGCUAUGUTT-3'
siPOLR3A#1	5'-GCAAGAGCUCCAUGUACUATT-3'
siTRIM24#1	5'-GAGCUCAUCAGAGGGUAAATT-3'
siTRIM24#2	5'-GCCACCAAGUGGUUUUAUCATT-3'
siSTAT3#1	5'-GGACGACUUUGAUUUCAACTT-3'
siSTAT3#2	5'-GGUACAUCAUGGGCUUUAUTT-3'
si-NC	5 '-UUCUCCGAACGUGUCACGUTT-3'