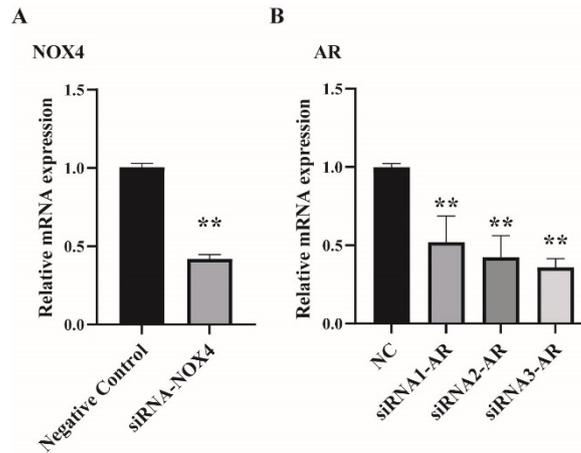
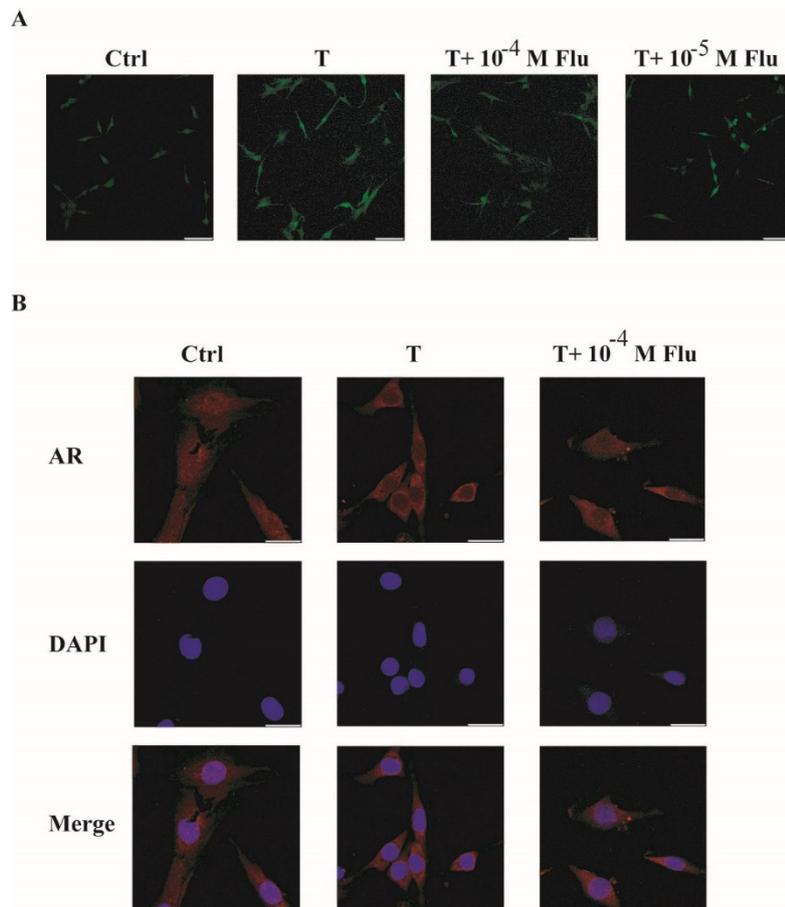


Supplementary Materials:



Supplemental Figure S1. Determination of the efficiency of siRNA-NOX4 and siRNA-AR in C2C12 cells. Fully differentiated C2C12 cells were transfected with siRNA-NOX4, siRNA-AR, or non-silencing RNA (NC). Thirty-six hours later, cells were collected and transfection efficiency was determined. (A) quantitative PCR assays of NOX4 mRNA levels. (B) quantitative PCR assays of AR mRNA levels. Three siRNA-AR sequences were used, designated siRNA1-AR, siRNA2-AR, and siRNA3-AR. The data are presented as means \pm SEM of three independent experiments. *, $p < 0.05$, **, $p < 0.01$, T, testosterone. AR, androgen receptor.



Supplemental Figure S2. Effects of flutamide intervention on T-treated C2C12 cells. (A) Representative photomicrographs of intracellular ROS in C2C12 cells.

Fully differentiated C2C12 cells were pretreated with flutamide (10^{-4} and 10^{-5} M) for 1 h followed by the treatment with T (0 , 10^{-5} M) for 12 h. ROS was measured by DCFH-DA staining. Sale bar = 100 μ m. (B) The subcellular localization of AR. Fully differentiated C2C12 cells were pretreated with flutamide (10^{-4} M) for 1 h followed by the treatment with T (0 , 10^{-5} M) for 12 h. Red: AR; Blue: DAPI. Scale bar = 25 μ m. T, testosterone; AR, androgen receptor; Flu, flutamide.

Supplemental Table S1. Primer sequences used for quantitative RT-PCR

Gene	Sequences 5'-3'
<i>GAPDH</i>	F: ATGACATCAAGAAGGTGGTG R: CATACCAGGAAATGAGCTTG
<i>AR</i>	F: AAGGGAGGTTACGCCAAAGG R: TGCCGTAGTCCAATGGGTTC
<i>NOX4</i>	F: TGTGGGCCTAGGATTGTGTT R: AGGGACCTTCTGTGATCCTCG
<i>SOD1</i>	F: CCAGTGCAGGACCTCATTTT R: TTGTTTCTCATGGACCACCA
<i>SOD2</i>	F: TCTGCAGGGTACAACCATCA R: ACCTCCATCGGGTTGTAGTG
<i>GR</i>	F: TCCAAGTGGTGACTTCCGTG R: ATGTGGCCCTTTTCATCCGT
<i>NOX2</i>	F: TGTGGTTGGGGCTGAATGTC R: CTGAGAAAGGAGAGCAGATTTTCG
<i>Catalase</i>	F: CACTGACGAGATGGCACACT R: TGTGGAGAATCGAACGGCAA
<i>GPx1</i>	F: ACAGTCCACCGTGTATGCC R: TCATTCTTGCCATTCTCTGGTG

Supplemental Table S2. siRNA sequences targeting AR and NOX4 mRNA

	siRNA Sequences 5'-3'
siRNA1-AR	F: GACUCAGCUGCCCAUCCATT R: UGGAUGGGGCAGCUGAGUCTT
siRNA2-AR	F: CUGGGAAAGUCAAGCCCAUTT R: AUGGGCUUGACUUUCCCAGTT
siRNA3-AR	F: CCUUUGCUGCCUUGUUAUCUATT R: UAGAUACAAGGCAGCAAAGGTT
siRNA-NOX4	F: GACCUGACUUUGUGAACAUUTT R: AUGUUCACAAAGUCAGGUUCTT
Negative control (NC)	F: UUCUCCGAACGUGUCACGUTT R: ACGUGACACGUUCGGAGAATT