Figure S1. Generation of the ischemic model. (A) Femoral artery ligation operation. (B) Blood flow on the 1st day after operation.

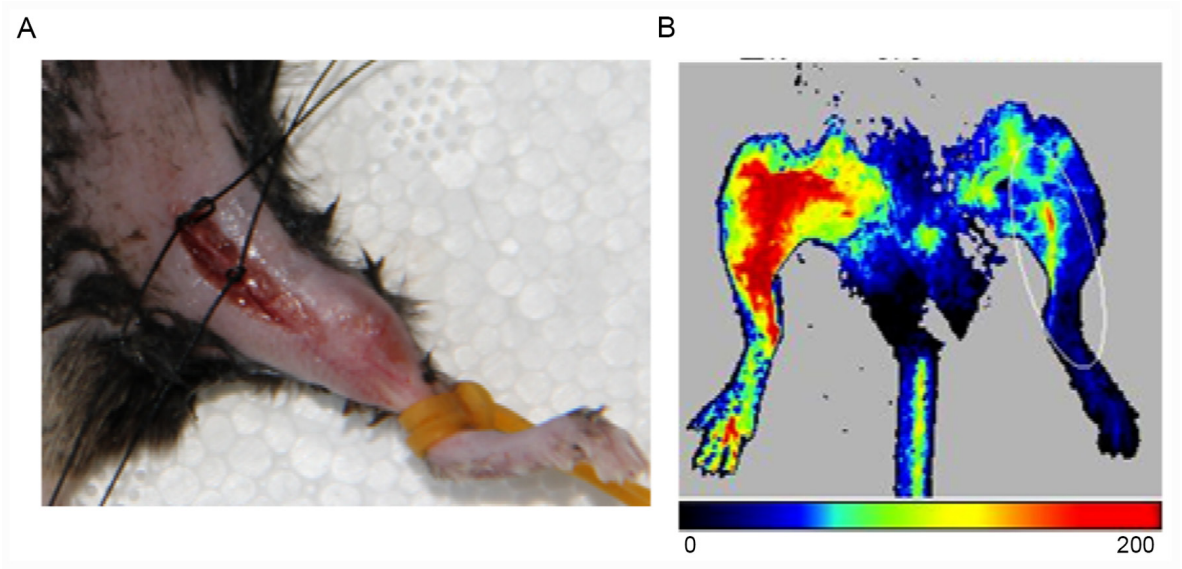

Figure S2. Verification of C2C12 cells. (A) C2C12 myoblasts seeded at a low density. (B) After 3 days of stimulation with 20 ml/l horse serum, fusion of cells and formation of myotubes were observed. (C) On day 5, longer and larger myotubes were observed. (D) Myotubes were stained with Giemsa on day 5. Data are presented as the mean ± standard deviation and are representative of two independent experiments. Scale Bar, 200 μm. (E) Anti-MHC western blotting. MHC, myosin heavy chain.

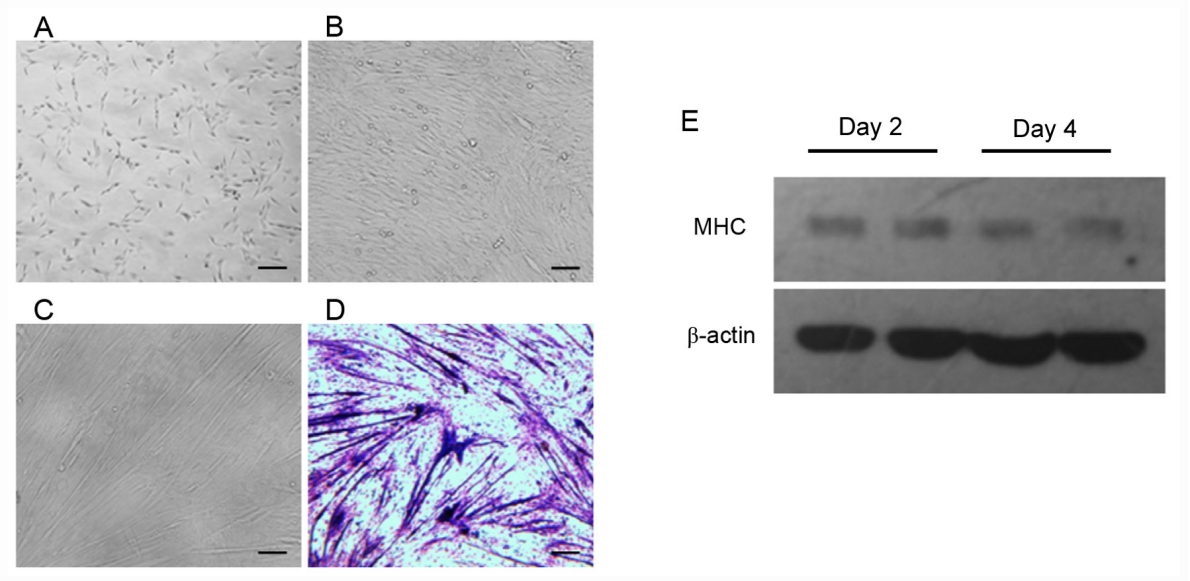

Figure S3. rmVEGF could induce the oxidative fiber switch in C2C12 myotubes. (A) Reverse transcription semi-quantitative PCR analysis of VEGF receptor 1 and 2 mRNA expression in C2C12 myotubes on day 5 after differentiation. (B) Induction of MHCIIa mRNA expression after treatment with various concentration of rmVEGF in murine C2C12 myotubes, as determined by reverse transcription-quantitative PCR. (C) Identification of oxidative fibers by MHCIIa immunofluorescence in C2C12 cells treated with 20 ng/ml VEGF for 12 h. Data are presented as the mean ± standard deviation and are representative of two independent experiments in triplicate. Scale bars, 100 μm. *P<0.05 vs. cells treated with 20 ng/ml rmVEGF for 24 h. rh, recombinant human; conc, concentration; MHCIIa, myosin heavy chain IIa.