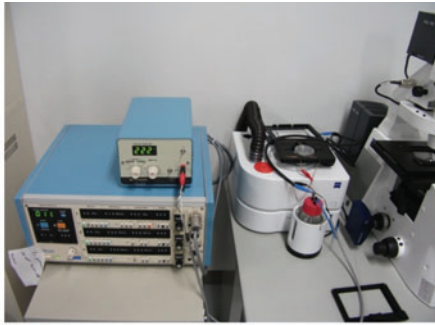


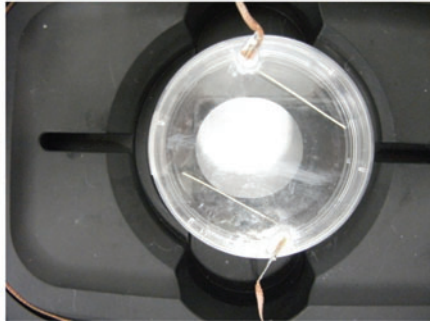
**A**

Isolator unit

Electronic stimulator



**B**



**SUPPLEMENTARY FIG. S2.** (A) The apparatus used to electrically stimulate engineered C2C12 muscle tissue. (B) The design of the *in situ* chamber (37°C, 5% CO<sub>2</sub> atmosphere) ensured the long-term viability of the myotubes. Long Pt wires that served as electrodes were placed inside the Petri dish near the muscle tissue. This arrangement effectively increased the efficiency of the applied electric field.