



**Figure S1:** Concentration optimization for Tempol and doxycycline doses in in vitro conditions. Representative images shown on Day 30 upon switching to differentiation medium. Tempol at 100  $\mu\text{M}$  enabled better myotube preservation than 50  $\mu\text{M}$ . Further increases in the dosage have a negative effect. Similarly, doxycycline at 0.5  $\mu\text{g/mL}$  gave the highest number of myotube preservation. Scale = 100  $\mu\text{m}$ .