

Influence of exposure time and driving frequency on cytotoxicity in in vitro ultrasound  
with constant mechanical indices

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## Supplementary Note 1

To evaluate the occurrence of acoustic cavitation, the amount of dissolved oxygen (DO) in the culture medium after 100 s of ultrasonic irradiation was measured. Notably, the frequency and acoustic pressure of the ultrasound were 2.09 MHz and 1.94 MPa, respectively. The amount of DO in the culture medium after 100-s of ultrasonic irradiation was significantly lower than that not exposed to ultrasound (Fig. S1). A previous study demonstrated that the amount of DO decreased because of rectified diffusion when acoustic cavitation occurred. Thus, the results demonstrated that acoustic cavitation occurred in the dish during ultrasonic irradiation.

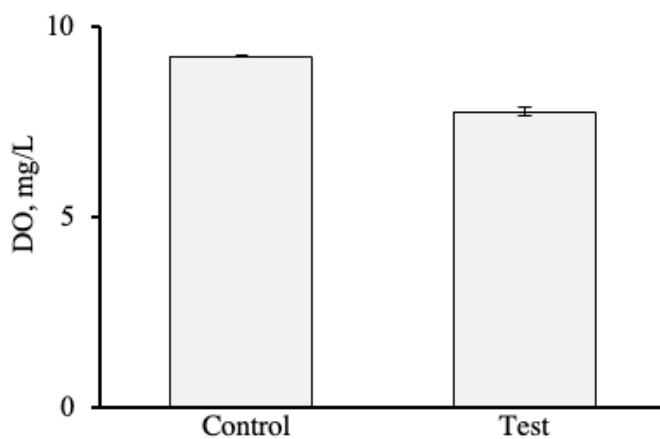


Figure S1 The amount of dissolved oxygen (DO) in the media after 100 s of ultrasound irradiation. The frequency and the acoustic pressure of the ultrasound were 2.09 MHz and 1.94 MPa, respectively. Control and Test indicate the samples with and without ultrasound irradiation, respectively.