

Supplemental Data

Figure S1. CAD model of the bioreactor.

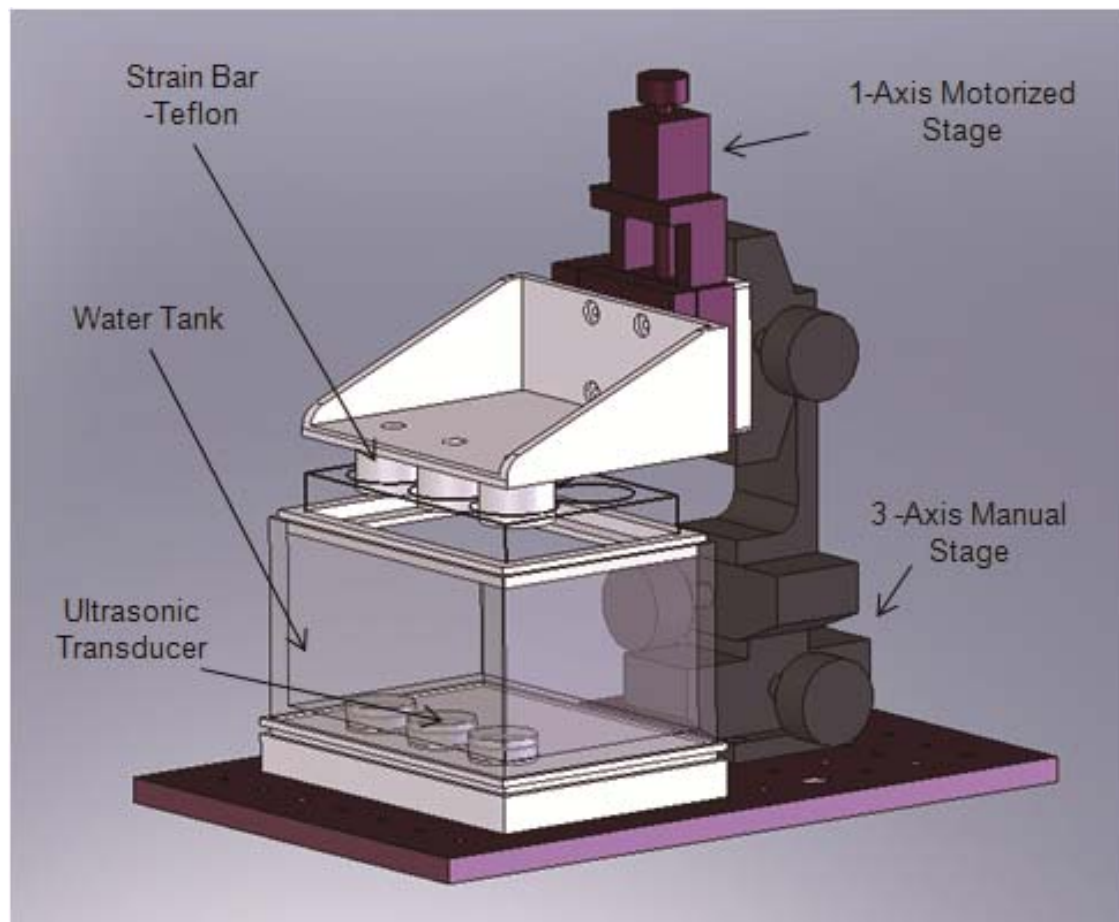


Figure S2.

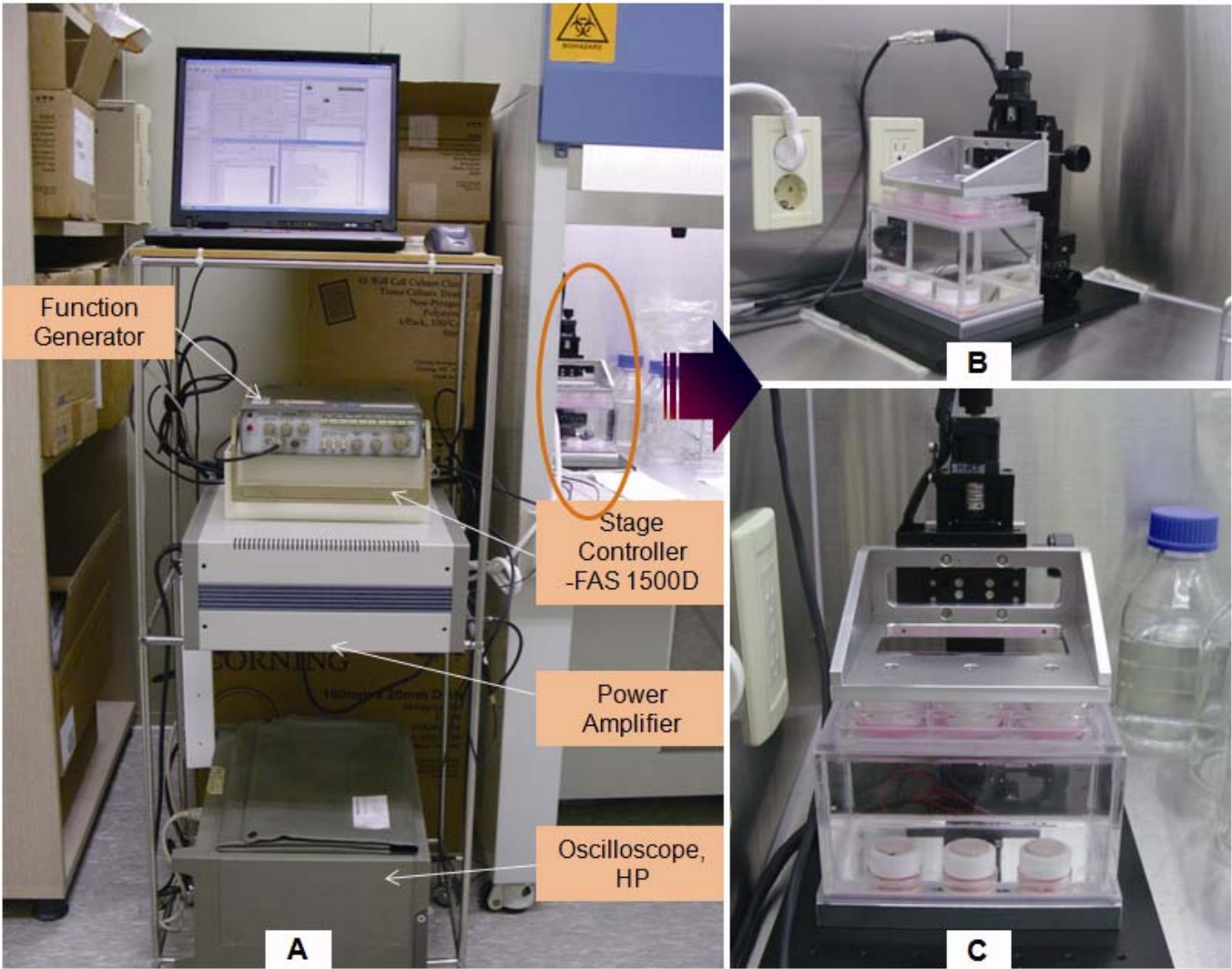


Figure S3.

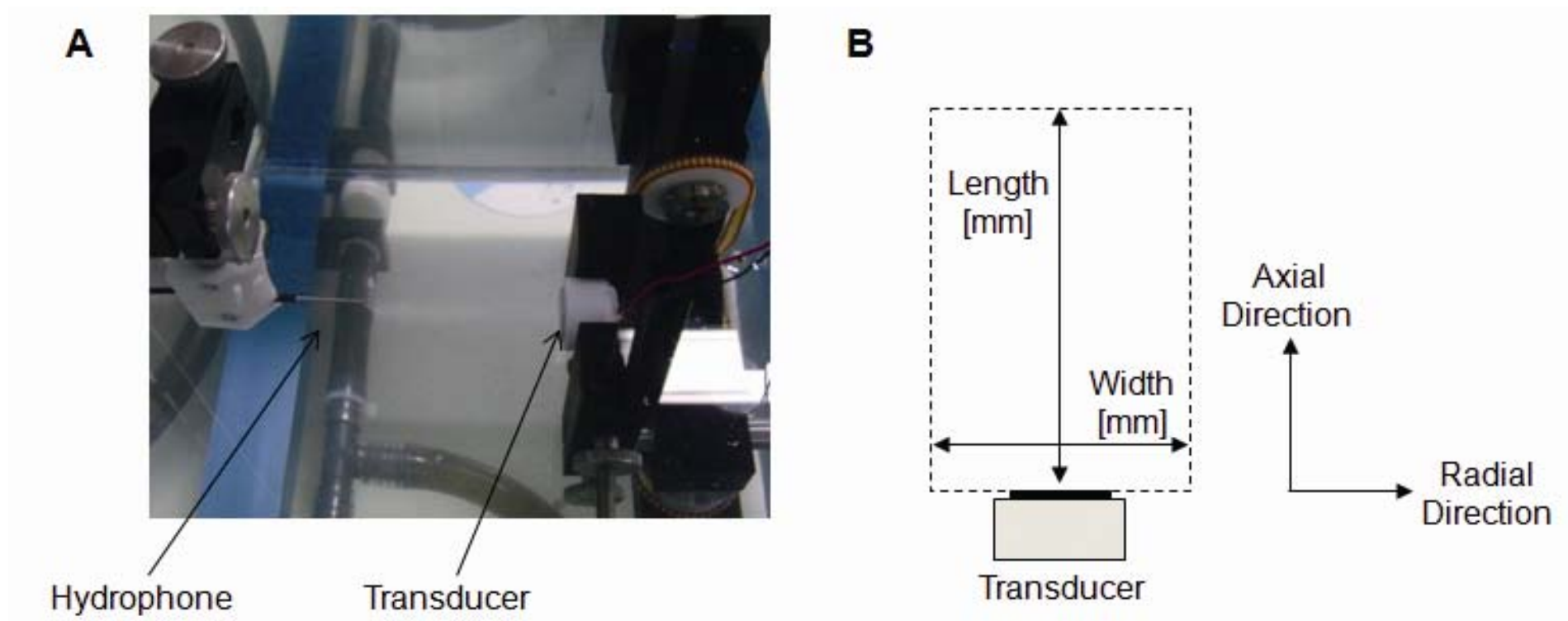


Figure S4.

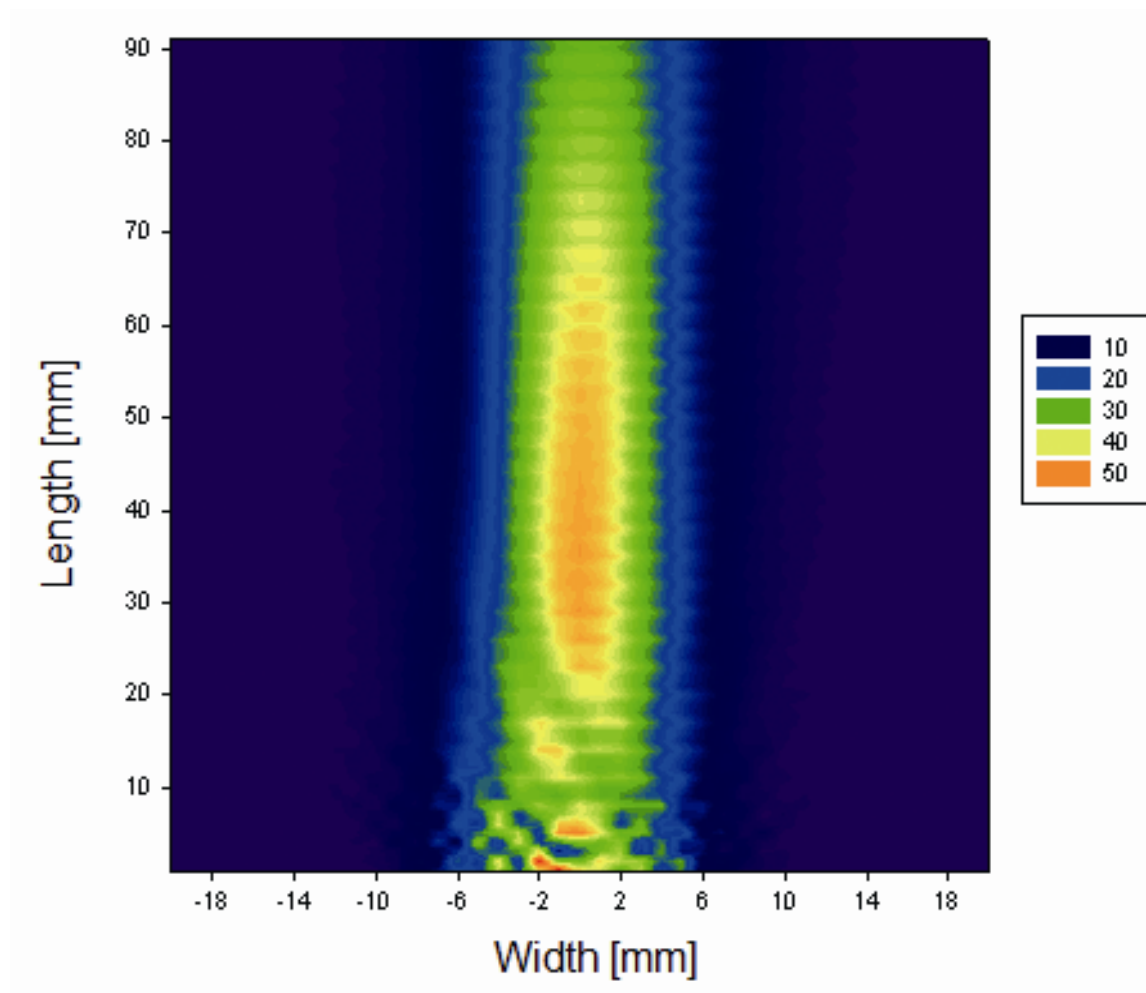


Figure S5.

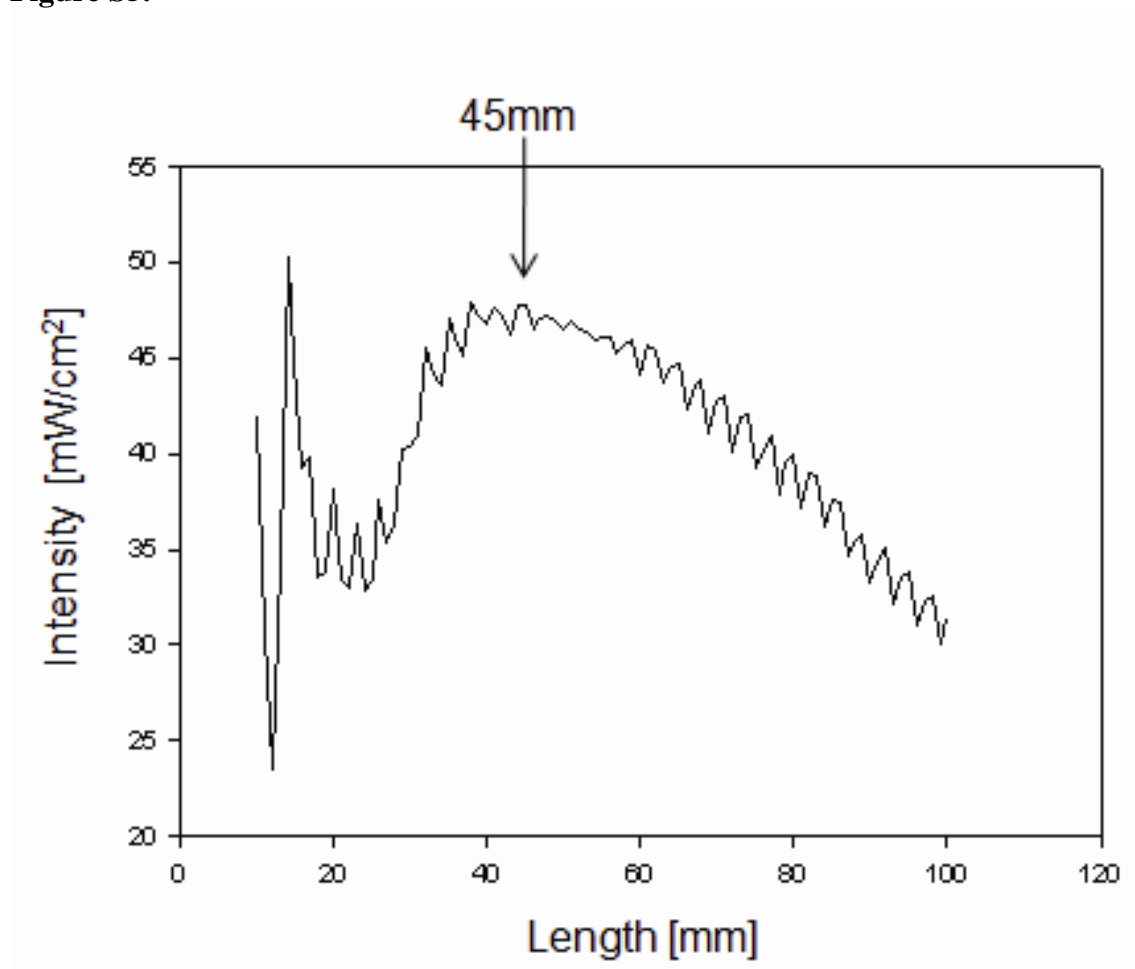


Table S1. Test groups according to the type of mechanical stimuli.

Condition	Stimulation type
U	Ultrasound
U+C	Combined stimulation (ultrasound and cyclic strain)
C	Cyclic strain
CN	Control (no stimulation)

Table S2. Sequences of oligonucleotide primers for RT-PCR.

Gene	Fragment size (bp)	Oligonucleotides
OC (NM 001032298.2)	276	F: 5'-ATGAGGACCCTCTCTCTGCTCACT-3' R: 5'-ACCGTAGATGCGTTTGTAGGC-3'
OC (for real-time PCR) (NM 001032298.2)	81	F: 5'-CCGGGAGCAGTGTGAGCTTA-3' R: 5'-TAGATGCGTTTGTAGGCGGTC-3'
COL-I (NM 007742.3)	312	F: 5'-GAAGTCAGCTGCATACAC-3' R: 5'-AGGAAGTCCAGGCTGTCC-3'
COL-I (for real-time PCR) (NM 007742.3)	83	F: 5'-GCATGGCCAAGAAGACATCC-3' R: 5'-CCTCGGGTTTCCACGTCTC-3'
GAPDH (XM 001476707.1)	983	F: 5'-TGAAGGTCGGTGTGAACGGATTTGGC-3' R: 5'-CATGTAGGCCATGAGGTCCACCAC-3'
GAPDH (for real-time PCR) (XM 001476707.1)	151	F: 5'-GCACAGTCAAGGCCGAGAAT-3' R: 5'-GCCTTCTCCATGGTGGTGAA-3'
RUNX2 (for real-time PCR) (NM 009820.4)	67	F: 5'-AAATGCCTCCGCTGTTATGAA-3' R: 5'-GCTCCGGCCCACAAATCT-3'
OSX (for real-time PCR) (NM 130458.3)	85	F: 5'-CCCTTCTCAAGCACCAATGG-3' R: 5'-AGGGTGGGTAGTCATTTGCATAG-3'