

Materials List for:

# Generation and Quantitative Analysis of Pulsed Low Frequency Ultrasound to Determine the Sonic Sensitivity of Untreated and Treated Neoplastic Cells

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## Materials

Name	Company	Catalog Number	Comments
Iscove's Modified Dulbecco's Medium w/ NaHCO <sub>3</sub> & 25mM Hepes	Life Technologies	12440079	
Amphotericin B Solution	Sigma-Aldrich	A2942	
Penicillin/Streptomycin 100x Solution	Life Technologies	10378-016	
Fetal Bovine Serum	Sigma-Aldrich	12105	
Branson SLPe 40kHz Cell Disruptor with 3" (25mm) Cuphorn	Branson Ultrasonics	101-063-726	sonication device
Brisk Heat SDC Benchtop Digital temperature Controller w/ 1000 ml Beaker Heater	Brisk Heat	SDCJF1A-GBH1000-1	heater used for temperature control
Beckman-Coulter Z2 Cell Sizer with AccuComp® Software	Beckman-Coulter	6605700	
Bio-Rad TC20 Automated Cell Counter	Bio-Rad	145-0102	
Gentamicin 50 mg/ml	Sigma-Aldrich	G1397	
Trypan Blue Solution	Sigma-Aldrich	T8154	
Falcon 50 ml & 25 ml Vented Culture Flasks	Fisher Scientific	353082	
Lonza L-Glutamine 200 mM 0.85% NaCl	Lonza	17-605C	
Seal-Rite 1.5 ml Microcentrifuge Tubes	USA Scientific	1615-5510	
Beckman-Coulter Accuvette ST 25 ml Vials and caps	Beckman-Coulter	A35473	
AccuJet Pro Auto Pipet	BrandTech Scientific	26330	
USA Scientific 10 ml Disposable Serological Pipets	USA Scientific	1071-0810	
Tip One 100 µl and 1,000 µl Filter Tips	USA Scientific	1120-1840, 1126-7810	
100 µl Micropipette	Wheaton	851164	
1,000 µl Micropipette	Wheaton	851168	
BioRad Dual Chamber Counting Slides	Bio-Rad	145-0015	
Forma Scientific Dual chamber water jacketed Incubator	Forma Scientific	3131	
Tektronix DPO 2002B Digital Phosphor Oscilloscope	Tektronix	DPO2002B	used to measure the ultrasonic waveform

PPB MegaSonics Model PB-500 Ultrasonic Energy Meter	PPB Megasonics	PB-500	used to assess the sound intensity in $W/cm^2$
Teledyne RESON TC4013-1 Hydrophone	Teledyne	TC4013-1	connects to the oscilloscope
Wheaton 250 ml Flasks	Sigma-Aldrich	Z364827	
20 ml Glass Scintillation Vials	Sigma-Aldrich	Z190527	
Beckman-Coulter Isotonic Saline Solution	Beckman-Coulter	N/A	diluent for Z2 counter
Chloroform 99%	Sigma-Aldrich	C2432	
Ethanol 200 Proof Anhydrous	Sigma-Aldrich	459836	
Mineral Oil	N/A		
XTT Cell Proliferation Assay Kit	ATCC	30-1011K	
96-Well Microplate Reader	Cole-Palmer	EW-13055-54	
U937 Human Monocytic Leukemia Cells	ATCC	CRL 1593.2	
THP1 Human Monocytic Leukemia Cells	ATCC	TIB-202	