

Materials List for:

# Synthesis of Phase-shift Nanoemulsions with Narrow Size Distributions for Acoustic Droplet Vaporization and Bubble-enhanced Ultrasound-mediated Ablation

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## Materials

Name	Company	Catalog Number	Comments
DPPC	Avanti Lipids, Alabaster, AL, USA	850355P	1,2-dipalmitoyl-sn-glycero-3-phosphocholine
DSPE-PEG2000	Avanti Lipids, Alabaster, AL, USA	880120P	1,2-distearoyl-sn-glycero-3-phospho- <i>l</i> -thanolamine-N-[methoxy(polyethylene glycol)-2000] (ammonium salt)
DDFP	Fluoromed, Round Rock, TX, USA	CAS: 138495-42-8	Dodecafluoropentane (C <sub>5</sub> F <sub>12</sub> )
PBS	Sigma-Aldrich, St. Louis, MO, USA	P2194	Phosphate-buffered saline
Chloroform	Sigma-Aldrich, St. Louis, MO, USA	372978	Chloroform
Acrylamide	Sigma-Aldrich, St. Louis, MO, USA	A9926	40% 19:1 acrylamide/bis-acrylamide
Tris buffer	Sigma-Aldrich, St. Louis, MO, USA	T2694	1M, pH 8, trizma hydrochloride and trizma base
BSA	Sigma-Aldrich, St. Louis, MO, USA	A3059	Bovine serum albumin
APS	Sigma-Aldrich, St. Louis, MO, USA	A3678	Ammonium persulfate solution
TEMED	Sigma-Aldrich, St. Louis, MO, USA	87689	N,N,N',N'-Tetramethylethylenediamine
<b>Equipment</b>			
Sonicator (3 mm tip)	Sonics Materials, Inc., Newtown, CT, USA	Vibra-Cell	
Water bath	Thermo Fisher Scientific, Waltham, MA, USA	Neslab EX-7	
Extruder	Northern Lipids, Burnaby, BC, Canada	LIPEX	
Extruder Filters	Whatman, Piscataway, NJ, USA	Nuclepore #110605 and #110606	
Extruder Drain Disc	Sterlitech Corporation, Kent, WA, USA	#PETEDD25100	
Plastic chamber	U.S. Plastic Corporation, Lima, OH, USA	#55288, 1 3/16"x1 3/16"x2 7/16"	