

Materials List for

# Focused Ultrasound Induced Blood-Brain Barrier Opening for Targeting Brain Structures and Evaluating Chemogenetic Neuromodulation

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jove.com/video/61352

## Materials

Name	Company	Catalog Number	Comments
21-gauge needles (BD)	Fisher Scientific	14826C	
25-gauge butterfly catheter	Harvard Bioscience	725966	
30-gauge needles (BD)	Fisher Scientific	14826F	
Absorbent blue pad	Office Depot	902406	
Anti-c-Fos antibody	Santa Cruz Biotechnology	SC-253-G	
Anti-mCherry antibody	ThermoFisher	PA534974	
Bruker Biospec 70/30	Bruker	custom	includes the RF coils
Clozapine-n-oxide	Tocris	4936	
Custom designed 3D printed mouse harnesses and MRIGFUS targeting components	ImageGuidedTherapy, Szablowski lab	custom	download from szablowskilab.org/downloads
Custom MRIGFUS machine	ImageGuidedTherapy	N/A	
Definity microbubbles	Lantheus	DE4	
Degassed aquasonic/ultrasound gel	Fisher Scientific	5067714	
Depilation crème	Nair	n/a	
Eight-element annular array transducer	Imasonic Inc.	custom	
Ethanol Pads/Alcohol Swabs (70%) (BD)	Office Depot	599893	
Heparin	Sigma-Aldrich	H3149-25KU	
Isoflurane	Patterson Veterinary	07-893-1389	
Ketamine	Patterson Veterinary	07-890-8598	
Neutral buffered formalin (10%)	Sigma-Aldrich	HT501128-4L	
Optical fiber hydrophone	Precision Acoustics		
PE10 tubing	Fisher Scientific	NC1513314	
Peristaltic pump			
Phosphate-buffered saline (PBS)	Sigma-Aldrich	524650-1EA	

Prohance contrast agent	Bracco	0270-1111-04	
Saline	Fisher Scientific	NC9054335	
Secondary antibody, Donkey-anti goat	ThermoFisher	A-11055	
Secondary antibody, Donkey-anti rabbit	ThermoFisher	84546	
Surgical scissors (straight)	Fisher Scientific	17467480	
ThermoGuide Software	ImageGuidedTherapy		
Tissue glue (Gluture)	Fisher Scientific	NC9855218	
Tuberculin Syringe (1 mL) (BD)	Fisher Scientific	14823434	
VeroClear 3D printable material	Stratasys	RGD810	
Vialmix microbubble activation device	Lantheus	VMIX	
Vibrating microtome	Compresstome	VF-300	
Xylazine	Sigma-Aldrich	X1251-1G	