

Materials List for:

# Live Imaging of Drug Responses in the Tumor Microenvironment in Mouse Models of Breast Cancer

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## Materials

Name	Company	Catalog Number	Comments
<b>Reagent</b>			
MMTV-PyMT mice	Jackson Laboratory	2374	
C3(1)-Tag mice	Jackson Laboratory	13591	
ACTB-ECFP mice	Jackson Laboratory	3773	
ACTB-H2B-EGFP mice	Jackson Laboratory	5418	
1 x PBS	Made in-house		
2 MD Dextran, Fluorescein-conjugated	Invitrogen	D-7137	Reconstitute in dH <sub>2</sub> O (4 mg/mL, store at -20 °C); dilute to 1 mg/ml in 1 x PBS
10 kD Dextran, Alexa Fluor 647-conjugated	Invitrogen	D-22914	Reconstitute in dH <sub>2</sub> O (4 mg/mL, store at -20 °C); dilute to 1 mg/ml in 1 x PBS
Doxorubicin hydrochloride	Sigma-Aldrich	44583	Reconstitute in dH <sub>2</sub> O and store at 4 °C; dilute in 1 x PBS
Isothesia (Isoflurane)	Butler Animal Health Supply	029450	250 ml
Propidium iodide	Invitrogen	P3566	1 mg/ml; dilute 1:15 in 1 x PBS
Nitrogen			
Oxygen			
<b>Equipment</b>			
18G x 1½" regular bevel needle	BD	305196	
µManager	Vale Lab, UCSF	<a href="http://www.micro-manager.org">www.micro-manager.org</a>	Open-source software
Alcohol swab	BD	326895	70% isopropyl alcohol swabs
Anesthesia system	Molecular Imaging Products, Co.		
Cover glass	Corning	2940-245	No. 1½, 24x50 mm; disinfect with 70% isopropanol wipes
Curity gauze sponges (sterile)	Kendall	6939	
Glass microscope slides	Corning	2948-75x25	Pre-cleaned; if not pre-cleaned, disinfect with 70% isopropanol wipes
Hardened fine scissors	Fine Science Tools	14090-11	2 pairs; stainless steel, sharp-sharp tips, straight tip, 26 mm cutting edge, 11 cm length
Heated blanket	Gaymar Industries		
Hot bead sterilizer	Fine Science Tools	18000-45	Turn on approximately 30 min before use; sterilize tools at >200 °C for 30 sec

Imaris	Bitplane	<a href="http://www.bitplane.com">www.bitplane.com</a>	
Krazy Glue	Elmer's Products	KG484	
Laboratory tape ( 1/2")			
Laboratory tape (1")			
Lid to a Styrofoam shipping cooler			This will be used as the surgical platform
Micro dissecting forceps	Roboz	RS-5153	1x2 teeth, slight curve, 0.8 mm tip width, 4" length
Micro dissecting forceps	Roboz	RS-5135	Serrated, slight curve, 0.8 mm tip width; 4" length
Microscope			Spinning-disk confocal, XYZ Piezo stage, epifluorescence capability <sup>17,25</sup>
Microscope stage insert	Applied Scientific Instrumentation		Custom fabricated, with two circular imaging ports
MouseOx oximeter, software, and sensors	STARR Life Sciences	<a href="http://www.starrlifesciences.com">www.starrlifesciences.com</a>	
Nalgene Super Versi-Dry lab soakers	Thermo Scientific	74218-00	Cut into fourths for lining surgical platform
Nebulizer	Salter Labs	8901	Used to humidify gases; prevents irritation of lung tissues
Slip-tip disposable tuberculin syringe (1 ml)	BD	309659	
Surflo winged infusion set	Terumo	SV-23BLK	23G x 3/4" ultra thin needle, 12" tubing
Betadine Spray	Purdue Pharma	BASP3H	