Materials List for:

## In Vivo EPR Assessment of pH, $pO_2$ , Redox Status, and Concentrations of Phosphate and Glutathione in the Tumor Microenvironment

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## **Materials**

Name	Company	Catalog Number	Comments
L-band EPR spectrometer	Magnettech, Germany		L-band (1.2 GHz) electron paramagnetic resonance (EPR) spectrometer for collection in vitro and in vivo spectra of paramagnetic molecules
Temperature & Gas Controller	Noxygen, Germany		Temperature & Gas Controller designed to control and adjust the temperature and gas composition
Sonicator	Fisher Scientific		
GSH (L-Glutathione reduced)	Sigma-Aldrich	G4251	
MMTV-PyMT mice	In house		
DMEM	Thermo Fisher Scientific	11995065	
Met-1 murine breast cancer cells	In house		
C57BI/6 wild type mice	Jackson Laboratory		
Trypsin	Thermo Fisher Scientific	25200056	
Trypan Blue Exclusion Dye	Thermo Fisher Scientific	T10282	
Ohmeda Fluotec 3			
Isoflurane (IsoFlo)	Abbott Laboratories		
Sodium phosphate dibasic	Sigma-Aldrich	S9763	
Sodium phosphate monobasic	sigma-Aldrich	S07051	
Sodium Chloride	sigma-Aldrich	S7653	
Hydrochloric acid	sigma-Aldrich	320331	
Sodium Hydroxide	sigma-Aldrich	S8045	
Glucose	sigma-Aldrich		
Glucose oxydase	sigma-Aldrich		
Lauda Circulator E100	Lauda-Brikmann		
pH meter Orion	Thermo Scientific		
LiNc-BuO probe	In house		The Octa-n-Butoxy- Naphthalocyanine probe was synthesizided according to ref 13
NR probe	In house		The Nitroxide probe was synthesizided according to ref 11
RSSR probe	In house		The di-Nitroxide probe was synthesizided according to ref 15

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HOPE probe	In house	The monophoshonated
'		Triarylmethyl probe was
		synthesizided according to ref 12