

Materials List for:

Combined Intravital Microscopy and Contrast-enhanced Ultrasonography of the Mouse Hindlimb to Study Insulin-induced Vasodilation and Muscle Perfusion

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Materials

Name	Company	Catalog Number	Comments
C57BL/6 Mice	Charles river		Mice used were bred in-house
Vevo 2100 high-resolution ultrasound system	VisualSonics inc.		
MS250 non-linear transducer	VisualSonics inc.		
Vevo 2100 software	VisualSonics inc.		
Ultrasound gel (Aquasonic 100, colourless)	CSP Medical	133-1009	Ultrasound gel used to transmit the ultrasound waves
Vortex	VWR international	58815-234	
Heating pad	Pantlab		
Freestyle Precision Xceed	Abbott		To measure blood glucose level during the hyperinsulinemic-euglycemic clamp
Insulin Novorapid	Novo Nordisk		
Glucose monohydrate	Merck Millipore	1083421000	
Buffered saline solution	B. Braun	152118062	
PE-20 medical tubing	Becton, Dickinson and Company	427405	
Needle, 27 Gauge	Becton-Dickinson & Co	305109	
Medical tape	3M		
Ultrasound probe holder			Built In-house
Cotton swabs			Multiple Equivalent
Crema depilator			Multiple Equivalent
Gel tissue adhesive	Derma+flex	GA30005-2222	
Infusion pump	Harvard Apparatus	Harvard Apparatus PHD 2000	
Small fine straight scissors	Fine Science Tools (FST)	14090-09	
Needle holder	Fine Science Tools (FST)	12500-12	
Straight forceps with fine tip	Fine Science Tools (FST)	11251-20	
Stereomicroscope	Olympus	SZX12	
Camera	Basler	scA1390-17gc	
Image Grabber program	Built in-house		Image acquisition system
Timer	VWR	33501-418	
Syringes, 1 mL	Fisher	14-817-25	
Light source, fiber-optic	Schott	KL1500	Ideally has adjustable arms
Paraffin oil			Multiple Equivalent

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Microbubbles			
1,2-Distearoyl-sn-glycero-3-phosphocholine	Avanti Polar Lipids	850365C	
polyoxyethylene stearate	Sigma	p3440	
perfluorobutane gas	F2 Chemicals	C4F10(g)	
Decon FS200 ultrasonic bath	Decon Ultrasonics Ltd		
Vialmix	Lantheus Medical Imaging	515370-0810	
Multisizer Coulter Counter	Beckman Coulter Inc		