

Materials List for

Ex Vivo Analysis of Mechanically Activated Ca²⁺ Transients in Urothelial Cells

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jove.com/video/64532

Materials

Name	Company	Catalog Number	Comments
20x Objective	Olympus	UMPlanFL N	
24 G 3/4" catheter	Medline	Suresite IV slide	
4x Objective	Olympus	UPlanFL N	
Analog/digital converter	Molecular Devices	Digidata 1440A	
Anti-GFP antibody	Abcam	Ab6556	
Beam splitter	Chroma	T495lpxr	
Bipolar temperature controller	Warner Instruments	TC-344B	
CaCl ₂	Fluka	21114-1L	1 M solution
cellSens software	Olympus		Imaging software
CMOS camera	Hamamatsu	ORCA fusion	
Donkey anti-rabbit conjugated to Alexa Fluor 488	Jackson ImmunoResearch	711-545-152	
Excel	Microsoft Corporation		
Filter	Chroma	ET470/40X	
Glass capillaries Corning 8250 glass	Warner Instruments	G85150T-4	
Glucose	Sigma	G8270	
HEPES	Sigma	H4034	
Inline heater	Warner Instruments	SH-27B	
KCl	Sigma	793590	
Light source	Sutter Instruments	Lambda XL	
Manifold pump tubing	Fisherbrand	14-190-510	ID 1.52 mm
Manifold pump tubing	Fisherbrand	14-190-533	ID 2.79 mm
MgCl ₂	Sigma	M9272	
Mice	Jackson Lab	664	2-4 months old female C57BL/6J
Microforge	Narishige	MF-830	
Micromanipulator	Sutter Instruments	MP-285	
Microscope	Olympus	BX51W	

Mounting media with DAPI	Invitrogen	S36964	Slowfade Diamond Antifade with DAPI
NaCl	Sigma	S7653	
pClamp software	Molecular Devices	Version 10.4	Patch-clamp electrophysiology data acquisition and analysis software
Peristaltic pump	Gilson	Minipuls 3	
Piezoelectric actuator	Thorlabs	PAS005	
Pipette holder	World Precision Instruments		
Pipette puller	Narishige	PP-830	
Quick exchange heated base with perfusion and adapter ring kit	Warner Instruments	QE-1	Quick exchange platform fits 35 mm dish
Rhodamine-phalloidin	Invitrogen	R415	
Sigma-Plot	Systat Software Inc	Version 14.0	Scientific graphing and data analysis software
Silicone elastomer	Dow	Sylgard 184	
Single channel open-loop piezo controller	Thorlabs	MDT694B	
Square grid holder pad	Ted Pella	10520	
Suture	AD Surgical	S-S618R13	6-0 Sylk
Teflon mounting rod	Custom made		Use to mount the piezoelectric actuator in the micromanipulator
Tubing	Fisher Scientific	14171129	Tygon S3 ID 1/16 IN, OD 1/8 IN
USB Digital I/O device	National Instruments	NI USB-6501	