

Materials List for:

Implementing Patch Clamp and Live Fluorescence Microscopy to Monitor Functional Properties of Freshly Isolated PKD Epithelium

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Materials

Name	Company	Catalog Number	Comments
Fura-2 AM	Life Technologies	F-14185	
Fluo-8	AAT Bioquest	21091	
Poly-L-lysine	Sigma-Aldrich	P4707	
Pluronic acid	Sigma-Aldrich	F-68	solution
Shaker	Boekel Scientific	260350	
Light source	Sutter Instrument Co	Lambda XL	with integrated shutter/filter wheel driver
Neutral density filters	Nikon		ND4, ND8
Objective	Nikon	SFluo	40/1.3 DIC WD 0.22 oil
Camera	Andor Technologies	Zyla sCMOS	
Nikon microscope (inverted)	Nikon	Nikon Eclipse TE2000-S	
Cover Glass	Thermo Scientific	6661B52	
Diamond pencil	Fisher Scientific	22268912	
Image acquisition software	Nikon	Nikon NIS-Elements	
Image analysis software	ImageJ	http://imagej.nih.gov/	ND Utility plugin allows to import images in the native Nikon Instruments .nd2 format
Recording/perfusion chamber	Warner Instruments	RC-26	
Patch Clamp amplifier	Molecular Devices	MultiClamp 700B	
Data Acquisition System	Molecular Devices	Digidata 1440A	Axon Digidata® System
Low Pass Filter	Warner Instruments	LPF-8	8 pole Bessel
Borosilicate glass capillaries	World Precision Instruments	1B150F-4	
Micropipette Puller	Sutter Instrument Co	P-97	Flaming/Brown type micropipette puller
Microforge	Narishige	MF-830	Japan
Motorized Micromanipulator	Sutter Instrument Co	MP-225	
Inverted microscope	Nikon	Eclipse Ti	
Microvibration isolation table	TMC		equipped with Faraday cage
Multichannel valve perfusion system	AutoMate Scientific	Valve Bank II	
Recording/perfusion chamber	Warner Instruments	RC-26	
Software	Molecular Devices	pClamp 10 . 2	
Temperature controlled surgical table	MCW core		for rodents
Binocular stereomicroscope	Nikon	SMZ745	

Syringe pump-based perfusion system	Harvard Apparatus		
polyethylene tubing	Sigma-Aldrich	PE50	
Isoflurane anesthesia	http://www.vetequip.com/	911103	
Other basic reagents	Sigma-Aldrich		