

Materials List for:

# Controllable Ion Channel Expression through Inducible Transient Transfection

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## Materials

Name	Company	Catalog Number	Comments
pcDNA™4/TO Mammalian Expression Vector	ThermoScientific Fisher	V102020	
pcDNA™5/TO Mammalian Expression Vector	ThermoScientific Fisher	V103320	
PureLink Quick PCR Purification Kit	Invitrogen	K310001	
Swift™ MaxPro Thermal Cycler	Esco	n.a	
Restriction Enzymes	ThermoScientific Fisher	ER0501	
Agarose	Lonza	50004	
PureLink Quick Gel Extraction Kit	Invitrogen	K210012	
NanoDrop 2000c	ThermoScientific Fisher	ND-2000C	
T4 DNA Ligase	ThermoScientific Fisher	EL0011	
One Shot® TOP10 Chemically Competent <i>E. coli</i>	ThermoScientific Fisher	C404006	
Ampicillin (Sodium), USP Grade	Gold Bio	A-301-5	
Tryptone for microbiology	Merck	6.19305E+13	
Yeast Extract	BD worldwide	212750	
SIF6000R Incubated Shaker	LAB COMPANION	45H118	
NucleoSpin®plasmid	Macherey Nagel	740588.25	
MS 300V Power Supply	Major Science	MP-300V	
Owl™ EasyCast™ B1A Mini Gel Electrophoresis System	ThermoScientific Fisher	B1A	
T-REx™-293 cell line	Invitrogen	R710-07	
DMEM (1x), liquid (high glucose)	Gibco	41965-039	
HindIII-HF®	NEB	R3104S	
Apal	NEB	R0114S	
CutSmart® Buffer	NEB	B7204S	
pcDNA™6/TR Mammalian Expression Vector	ThermoScientific Fisher	V102520	
Fetal Bovine Serum (FBS), qualified, E.U.-approved, South America origin	Gibco	10270106	
HEPES Buffer Solution (1 M)	Biological Industries	03-025-1B	
Penicillin-Streptomycin Solution	Biological Industries	03-031-1B	
L-Alanyl-L-Glutamine (Stable Glutamine) (200 mM)	Biological Industries	03-022-1B	
Heracell™ 150i CO <sub>2</sub> Incubator	ThermoScientific Fisher	51026406	

MSC-Advantage™ Class II Biological Safety Cabinet	ThermoScientific Fisher	51025411	
Blasticidine S hydrochloride	Sigma-Aldrich	15205-25MG	
Dulbecco's Phosphate-buffered Saline (DPBS) Modified, without calcium chloride and magnesium chloride	Sigma-Aldrich	D8537-500ML	
Trypsin-EDTA (0.05%), phenol red	Gibco	25300054	
Double Neubauer Ruled Metallized Hemacytometer	Hausser Scientific	31000	
Opti-MEM I Reduced Serum Medium	Gibco	31985070	
TransIT®-LT1 Transfection Reagent	Mirus	MIR 2300	
glass coverslips, #1 thickness, 12 mm diameter round	Knittel Glass	GG-12	
BioCoat™ Poly-D-Lysine (PDL)	Corning	354210	
Water, Cell Culture Grade	Biological Industries	03-055-1A	
Doxycycline hyclate	Sigma-Aldrich	D9891-1G	
Fura-2, AM ester	Biotium	BTM-50034	
Pluronic® F-127	Sigma-Aldrich	P2443-250G	
μ-Slide 8 Well	ibidi	80826	
(E)-Capsaicin	Tocris	462	
Olympus IX70 Fluorescence Microscope	Olympus	n.a	
Lambda DG-4 Wavelength Switcher	Sutter Instruments	n.a	
EXi Blue Fluorescence Microscopy Camera	QImaging	n.a	
MetaFluor Fluorescence Ratio Imaging Software	Molecular Devices	n.a	
Thin Walled Borosilicate Tubing	Sutter Instruments	B150-110-7.5HP	
Standard Walled Borosilicate Tubing	Sutter Instruments	B150-86-7.5HP	
Dimethyl sulfoxide anhydrous	Sigma-Aldrich	276855	
P1000 micropipette puller	Sutter Instruments	P-1000	
MF-900 Microforge	NARISHIGE	n.a	
ValveBank perfusion system	AutoMate Scientific		
Digidata® 1440A Low-noise Data Acquisition System	Molecular Devices	n.a	
Axopatch 200B Amplifier	Molecular Devices	n.a	
pCLAMP 10.6 Software	Molecular Devices	n.a	
micromanipulator	Sutter Instruments	MP-225	