

Materials List for:

Methods for Precisely Localized Transfer of Cells or DNA into Early Postimplantation Mouse Embryos

Yali Huang¹, Ron Wilkie¹, Valerie Wilson¹

¹MRC Centre for Regenerative Medicine, School of Biological Sciences, University of Edinburgh

Correspondence to: Yali Huang at yali.huang@ed.ac.uk

URL: <https://www.jove.com/video/53295>

DOI: [doi:10.3791/53295](https://doi.org/10.3791/53295)

Materials

Name	Company	Catalog Number	Comments
Forceps	Dumostar	T5390	
Dissecting stereomicroscope	Zeiss	Stemi 2000-C	
Stereomicroscope system with fluorescence	Nikon	AZ100	
Inverted microscope with a digital camera	Olympus	Olympus BX61	
Inverted confocal microscope	Leica Microsystems	Leica TCS SP8	
Low melting point agarose	Life Technologies	16520-050	
Pasteur pipettes	Fisher Scientific	11397863	
30mm Petri dishes	Fisher Scientific	121V	
4-well plates	Thermo scientific	179820	
M2 medium	Sigma-Aldrich	M7167	
Phosphate Buffered Saline (PBS)	Life Technologies	10010015	
Paraformaldehyde (PFA)	Sigma-Aldrich	P6148	
Pipettes	NICHIRYO	Nichipet	
tips	Greiner Bio One	685280	
Cell culture incubator	SANYO	MCO-17AIC	
Roller culture apparatus	BTC Engineering		
Syringe filters 0.45µm, sterile	Sigma-Aldrich	10462100	
Glasgow Minimum Essential Medium (GMEM)	Sigma-Aldrich	G5154	
non-essential amino acids (NEAA)	Life Technologies	11140050	
L-glutamine	Fisher Scientific	SH30549.01	
Sodium pyruvate solution	Fisher Scientific	SH30239.01	
Penicillin and Streptomycin 10.000UI/ml	Lonza	DE17-602E	
Gas Cartridge for Portable Meker Burner	COLEMAN	COLEMAN 250	
Thin Wall Borosilicate Capillary Glass with Filament, OD 1.0 mm, ID 0.78 mm	Harvard Apparatus	640798	
Aspirator tube assemblies for calibrated microcapillary pipettes	Sigma-Aldrich	A5177-5EA	
Flaming/Brown micropipette puller	Sutter Instrument Company	P-97	
Microforge	De Fonbrune	BS030301	
Pneumatic pico pump	World Precision Instruments	PV830	
Microloader tips	Eppendorf	5242956.003	

ECM 830 square wave pulse generator	BTX	45-0002	
Green food coloring dye	Sigma-Aldrich	C.I. 42053	
A far-red cell membrane-impermeable nuclear dye	Biotium	40060-T	
pCAG-Cre:GFP	Addgene	#13776	
pCAG-GFP	Addgene	#16664	
Multimeter	Excel	XL830L	
Micromanipulators	Leitz		
0.2mm diameter platinum wire	Agar Scientific	E404-2	
Anti-GFP antibody	Abcam	ab13970	
Goat anti-Chicken IgY, HRP	Santa Cruz	sc-2428	
Liquid DAB+ Substrate Chromogen System	Dako	K3467	
4',6-diamidino-2-phenylindole (DAPI)	Life Technologies	D21490	
A far-red fluorescence nuclear counterstain	Life Technologies	T3605	