

Materials List for

Epon Post Embedding Correlative Light and Electron Microscopy

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Materials

Name	Company	Catalog Number	Comments
0.2 M Phosphate Buffer (PB)			NaH ₂ PO ₄ · 2H ₂ O+Na ₂ HPO ₄ · 12H ₂ O
0.2 M Tris-Cl (pH 8.5)	Shanghai yuanye Bio-Technology	R26284	
25% Glutaraldehyde (GA)	Alfa Aesar	A17876	Hazardous chemical
Abbelight 3D	Nanolnsights		
Acetone	SCR	10000418	
Ammonium hydroxide	J&K Scientific	335213	
BioPhotometer D30	eppendorf		
Cleaning buffer of cover glasses			50 mL Ammonium hydroxide, 50 mL Hydrogen peroxide, 250 mL H ₂ O
Coverglass	Warner	64-0715	
DABCO	Sigma	290734	Hazardous chemical
DDSA	SPI company	GS02827	Hazardous chemical
Desktop centrifuge	WIGGENS	MINICEN 10E	
Diamond knife	DIATOME	MX6353	
DMP-30	SPI company	GS02823	Hazardous chemical
DNA transfection reagent	Thermo Fisher	2696953	Lipofectamine 3000 Transfection Kit
Epon 812	SPI company	GS02659	Hazardous chemical
Ethanol	SCR	10009218	
Fiji image J	National Institutes of Health		
Fixative solution			4% PFA+0.25% GA+0.02 M PB
Formvar	Sigma	9823	
Glycerol	SCR	10010618	
Gold nanoparticles	Corpuscular	790120-010	
Gradient resin			Acetone to resin 3:1, 1:1, 1:3
Hydrofluoric acid	SCR	10011118	
Hydrogen peroxide	SCR	10011218	

ICY (https://icy.bioimageanalysis.org/about/)			Easy CLEMv0 Plugin
Imaging chamber	Thermo Fisher	A7816	
Large gelatin capsules	Electron Microscopy Sciences	70117	
Mounting buffer			Mowiol 4-88, Glycerol, 0.2 M Tris-Cl (pH 8.5), DABCO
Mowiol 4-88	Sigma	9002-89-5	
Na ₂ HPO ₄ · 12H ₂ O	SCR	10020318	
NaH ₂ PO ₄ · 2H ₂ O	SCR	20040718	
NMA	SPI company	GS02828	Hazardous chemical
Oligonucleotide primers	Takara Biomedical Technology (Beijing)		Three oligonucleotides primers were used to detect Vglut2-ires-Cre and wild-type simultaneously. The primers 5'-ATCGACCGGTAATGCAGGCAA-3' and 5'-CGGTACCACCAAATCTTACGG-3' aimed to detect Vglut2-ires-Cre. The primers 5'-CGGTACCACCAAATCTTACGG-3' and 5'-CATGGTCTGTTTTGAATTCAG-3' aimed to detect wild-type.
Oscillating microtome	Leica	VT1000S	
Osmium tetroxide	SCR	L01210302	Hazardous chemical
OsO ₄ solution			1% Osmium tetroxide+1.5% K ₄ Fe(CN) ₆ ·3H ₂ O
Parafilm	Ancor	PM-996	
Paraformaldehyde (PFA)	SCR	80096618	Hazardous chemical
Perfusion buffer			4% PFA+0.1 M PB
Pioloform	Sigma	63148-65-2	Hazardous chemical
Poly-L-lysine	Sigma	25986-63-0	
Potassium ferrocyanide (K ₄ Fe(CN) ₆ ·3H ₂ O)	SCR	10016818	
Scalpel blades	Merck	S2771	
Scalpel handles	Merck	S2896-1EA	
Stereomicroscope	OLYMPUS	MX10	
Transgenic mice	The Jackson Laboratory		Vglut2-ires-Cre mice (strain: 129S6/SvEvTac) were housed in standard conditions (25 °C, a 12 h light/dark cycle, with water and food given ad libitum. Male and Female mice were used at 2–3 months old, weight range 20-30 g.
Transmission electron microscope (TEM)	FEI		TECNAL G2
UA solution (2% UA)			Aqueous solution
Ultramicrotome	Leica	LEICA EM UC6	
Uranyl acetate (UA)	TED PELLA	19481	Hazardous chemical