

Materials List for:

Two-Photon *in vivo* Imaging of Dendritic Spines in the Mouse Cortex Using a Thinned-skull Preparation

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Materials

Name	Company	Catalog Number	Comments
Ketamine	Bioniche Pharma	67457-034-10	Mixed with xylazine for anesthesia
Xylazine	Lloyd laboratories	139-236	Mixed with ketamine for anesthesia
Saline	Hospira	0409-7983-09	0.9% NaCl for injection and imaging
Razor blades	Electron microscopy sciences	72000	Double-edge stainless steel razor blades
Alcohol pads	Fisher Scientific	06-669-62	Sterile alcohol prep pads
Eye ointment	Henry Schein	102-9470	Petrolatum ophthalmic ointment sterile ocular lubricant
High-speed micro drill	Fine Science Tools	18000-17	The high-speed micro drill is suitable for thinning the outer layer of compact bone and targeting a small area
Micro drill steel burrs	Fine Science Tools	19007-14	1.4 mm diameter
Microsurgical blade	Surgistar	6961	The microsurgical blade is suitable for thinning the inner layer of compact bone and middle layer of spongy bone
Cyanoacrylate glue	Fisher Scientific	NC9062131	Fix the head plate onto the skull
Suture	Havard Apparatus	510461	Non-absorbable, sterile silk suture, 6-0 monofilament
Dissecting microscope	Olympus		SZ61
CCD camera	Infinity		
Two-photon microscope	Prairie Technologies		Ultima IV
10X objective	Olympus		NA 0.30, air
60X objective	Olympus		NA 1.1, IR permeable, water immersion
Ti-sapphire laser	Spectra-Physics		Mai Tai HP