

Materials List for

Label-Free Non-Linear Optics for the Study of Tubulin-Dependent Defects in Central Myelin

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Materials

Name	Company	Catalog Number	Comments
405/10 nm BrightLine(R) single-band bandpass filter	Semrock	FF01-405/10-25	32 mm diameter, with housing ring
Black Nylon, Polyurethane-Coated Fabric	Thorlabs	BK5	5' x 9' (1.5 m x 2.7 m) x 0.005" (0.12 mm) Thick
Blades for vibratome	any commercial; e.g. Wilkinson Sword		Classic stainless steel double edge razor blades
Cell culture dishes, 35 mm	any commercial; e.g. Falcon	351008	
Confocal microscope	Zeiss	LSM710NLO AxioObserver Z1	Inverted microscope, objective used is LCI Plan-Neofluar 25x/0.8 NA
Cooler	any commercial		Any insulated, polystyrene box could work, to maintain the sample at about 37 °C
Corn starch	e.g. Maizena		From the supermarket
Coverslips #1.5	any commercial		Rectangular
Cyanoacrylate glue	e.g. Loctite		To glue the brain to the masking tape
Fine forceps	fine science tools	11412-11	To manipulate tissue sections by handling from the meninges
Fine scissors	fine science tools	14370-22	To cut the skin
Fine scissors curved tip	fine science tools	14061-09	To cut along the midline
Formaldehyde 37%	Sigma-Aldrich	252549	To dilute 1:10 in PBS
Friedman Rongeur	fine science tools	16000-14	To cut the bone
Gel packs	any commercial		Prewarmed to 37 °C, to help maintaining the temperature inside the cooler
Glass Pasteur pipette, modified	any commercial		To transfer the tissue section
Hanks' Balanced Salt solution (HBSS)	Gibco	14025-076	Could be prepared from powders
Kelly hemostats	fine science tools	13018-14	To separate the bone
Masking tape	any commercial		To protect the surface of the specimen plate

NDD module, type C	Zeiss	000000-1410-101	To detect the signal, reducing light loss. Housing the 000000-1935-163 filter set with the SP485
Offset bone nippers	fine science tools	16101-10	To cut the bone
Phosphate buffered saline (PBS)	Gibco	10010-031	Could be prepared from powders or tabs
Pulsed laser	Coherent	Chameleon Vision II	680–1080 nm tunable laser
Scalpel	any commercial		Straight blade with sharp point
Standard pattern forceps	fine science tools	11000-18	
Vannas spring scissors	fine science tools	15018-10	To cut meninges that remain joined to both the slice obtained from vibratome cutting and the section glued to the specimen plate.
Vibratome	any commercial; e.g. Leica	VT1200	