

Materials List for:

# A Stainless Protocol for High Quality RNA Isolation from Laser Capture Microdissected Purkinje Cells in the Human Post-Mortem Cerebellum

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## Materials

Name	Company	Catalog Number	Comments
MembraneSlide NF 1.0 PEN	Zeiss	415190-9081-000	Membrane slides for tissue. We do not recommend using glass slides.
AdhesiveCap 500 Opaque	Zeiss	415190-9201-000	Opaque caps are used to enhance visualization on inverted scopes only
RNase Away	Molecular BioProducts	7005-11	Other RNase decontamination products are also suitable. Use to clean all surfaces prior to work.
200 Proof Ethanol	Decon Laboratories	2701	If using alternative Ethanol, ensure high quality. Essential for tissue fixation.
Xylenes (Certified ACS)	Fisher Scientific	X5P-1GAL	If using alternative xylene, ensure high quality. Essential for tissue visualization.
UltraPure Distilled Water	Invitrogen	10977-015	Other RNA/DNA/Nuclease free water also suitable. Utilized in ethanol dilution only.
Slide-Fix Slide Jars	Evergreen	240-5440-G8K	Any slide holder/jar is also suitable. Must be cleaned prior to use. Used for fixation following sectioning.
Anti-Roll Plate, Assy. 70mm 100um	Leica Biosystems	14041933980	Anti-roll plate type is determined by type of cryostat and attachment location on stage. All cryostats have differing requirements.
Diethyl pyrocarbonate (DEPC)	Sigma Aldrich	D5758-50mL	DEPC from any vendor will do. Follow directions for water treatment.
Kimwipes	Fisher Scientific	06-666A	Kimwipes can be ordered from any vendor and used at any size. Kimwipes are to be used to clean microscope and cryostat.
Tissue-Plus O.C.T. Compound	Fisher Scientific	23-730-571	Any brand of OCT is acceptable. No tissue will be embedded in the OCT, it is strictly to attach tissue to 'chuck'.
Edge-Rite Low-Profile Microtome Blades	Thermo Scientific	4280L	Blade type is determined by type of cryostat. All cryostats have differing requirements.
Leica Microsystems 3P 25 + 30MM CRYOSTAT CHUCKS	Fisher Scientific	NC0558768	Chuck type is determined by type of cryostat. All cryostats have

			different requirements. Either size is suitable.
RNeasy Micro Kit (50)	Qiagen	74004	Required for RNA extraction post LCM. RLT Lysis buffer essential to gather captured cells from opaque cap.
RNeasy Mini Kit (50)	Qiagen	74104	Required for RNA extraction of section preps, which are performed prior to LCM to test RNA integrity of starting tissues.
RNase-Free DNase Set	Qiagen	79254	Dnase will remove any DNA to allow for a pure RNA population. Ensure Dnase is made fresh.
2-Mercaptoethanol	Sigma Aldrich	M6250-100ML	Purchased volume at user discretion. Necessary for addition to RLT buffer for cell lysis. Prevents RNase activity.
Globe Scientific Lot Certified Graduated Microcentrifuge Tube (2 mL)	Fisher Scientific	22-010-092	Any 2 mL tube that is RNase free, DNase free, human DNA free, and Pyrogen free will do.