

Materials List for:

3D Modeling of the Lateral Ventricles and Histological Characterization of Periventricular Tissue in Humans and Mouse

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Materials

Name	Company	Catalog Number	Comments
Phosphate buffered saline (PBS)	Life Technologies	21600-069	
Paraformaldehyde (PFA)	Electron Microscopy Sciences	19210	Use at 4% in PBS, 4 °C
Normal Horse Serum	Life Technologies	16050	10% in PBS-TX (v/v)
Normal Goat Serum	Life Technologies	16210	10% in PBS-TX (v/v)
Triton X-100 (TX)	Sigma-Aldrich	T8787	0.1% in PBS (v/v)
Vibratome	Leica	VT1000S	
Fluorescence Microscope	Zeiss	Imager.M2	
Camera	Hamamatsu	ORCA R2	
Microscope Stage Controller	Ludl Electronic Products	MAC 6000	
Stereology software	MBF Bioscience	Stereo Investigator 11	
Stereology software	ImageJ/NIH	NIH freeware	
3D Reconstruction software	MBF Bioscience	NeuroLucida Explorer	
Confocal Microscope	Leica	TCS SP2	
MRI Software			
Freesurfer	https://surfer.nmr.mgh.harvard.edu/fswiki/DownloadAndInstall	Segmentation and Volume	
ITK-Snap	http://www.itksnap.org/pmwiki/pmwiki.php		Segmentation and Volume
Multi-image Analysis GUI (Mango)	http://ric.uthscsa.edu/mango/		Longitudinal overlay
Whole Mount Equipment			
22.5° microsurgical straight stab knife	Fisher Scientific	NC9854830	
parafilm			
wax bottom dissecting dish			
pins			
fine forceps			
aquapoly mount			
Dissecting Microscope	Leica	MZ95	
Whole Mount Antibodies			
mouse anti-b-catenin	BD Biosciences, San Jose, CA, USA		1:250
goat anti-GFAP	Santa Cruz Biotechnology		1:250
rabbit anti-AQP4 (aquaporin-4)	Sigma-Aldrich		1:400
Coronal Antibodies			

Anti-S100 β antibody	Sigma-Aldrich		1:500
4',6-diamidino-2-phenylindole (DAPI)	Life Technologies	D-1306	10 μ g/ml in PBS