

Materials List for:

Organotypic Slice Cultures to Study Oligodendrocyte Dynamics and Myelination

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Materials

Name	Company	Catalog Number	Comments
Slice Culture Medium			
Minimum Essential Medium	Invitrogen	11090	50%
Hank's Balanced Salt Solution	Invitrogen	14175	25%
HEPES	Sigma-Aldrich	H-4034	25mM
L-Glutamine	Invitrogen	25030	1mM
Insulin	Sigma-Aldrich	I6634	1mg/L
Ascorbic Acid	Sigma-Aldrich	A-0278	0.4mM
Horse Serum	Hyclone	SH30074.03	25%
Titrate to pH 7.22 with NaOH, filter with bottle top filter, and store at 4 degrees Celsius			
Dissection Buffer			
NaCl	Sigma-Aldrich	S3014	124mM
KCl	Sigma-Aldrich	P5405	3.004mM
KH ₂ PO ₄	Sigma-Aldrich	P5655	1.25mM
MgSO ₄ (anhydrous)	Sigma-Aldrich	M7506	4.004mM
CaCl ₂ 2H ₂ O	Sigma-Aldrich	C7902	2mM
NaHCO ₃	Sigma-Aldrich	S5761	26mM
D-(+)-Glucose	Sigma-Aldrich	G7021	10mM
Ascorbic Acid	Sigma-Aldrich	A-0278	2.0mM
Adenosine	Sigma-Aldrich	A4036	0.075mM
Filter with bottle top filter and store at 4 degrees Celsius, oxygenate with 95%O ₂ 5%CO ₂ before use			
Other Reagents and Supplies			
4-hydroxy tamoxifen (4OHT)	Sigma-Aldrich	H7904	100nM
Paraformaldehyde (PFA)	EM Sciences	19200	4%
L-Lysine	Sigma-Aldrich	L-6027	0.1M
Sodium Metaperiodate	Sigma-Aldrich	S-1878	0.01M
Rabbit anti NG2 antibody	Chemicon (Millipore)	AB5320	1:500
Mouse anti CC1 antibody	Calbiochem (Millipore)	OP80	1:200
Mouse anti Ki67 antibody	Vision Biosystems	NCL-Ki67-MM1	1:300
Mouse anti NeuN antibody	Chemicon (Millipore)	MAB377	1:500
Species specific secondary antibodies	Jackson ImmunoResearch		
Normal Goat Serum (NGS)			5%

Triton X-100			0.10%
Mounting medium with DAPI	Vector Labs	H-1200	
Millicell culture membrane inserts 0.45µm pore size	Fisher Scientific	PICM03050	
Bottle top filters	Fisher Scientific	09-740-25E	
Ethanol			
95% O ₂ 5% CO ₂ gas mix			
Phosphate Buffered Saline (PBS)			
Sterile six well plates			
Dissecting (hippocampal) or weighing spatulas			
Manual or automatic tissue chopper			
Razor blades			
Disposable transfer pipettes			
35mm and 60mm sterile Petri dishes			
Stereomicroscope			
Inverted Phase Microscope			
Laminar Flow Hood			
Tissue Culture Incubator			
Inverted Fluorescence Microscope			