

Materials List for:

Low-Density Primary Hippocampal Neuron Culture

Reiko T. Roppongi^{1,2}, Kevin P. Champagne-Jorgensen^{1,2}, Tabrez J. Siddiqui^{1,2}

¹Department of Physiology and Pathophysiology, University of Manitoba

²Kleysen Institute for Advanced Medicine, Health Sciences Centre

*These authors contributed equally

Correspondence to: Tabrez J. Siddiqui at Tabrez.Siddiqui@umanitoba.ca

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Materials

Name	Company	Catalog Number	Comments
Dissection Instruments			
Micro Dissecting Scissors	Roboz	RS-5910	
Micro Dissecting Spring Scissors	Roboz	RS-5650	
Micro Dissecting Spring Scissors	Roboz	RS-5605	
Dumont Forceps (#5)	Roboz	RS-5045	
Dumont Forceps (#PP)	Roboz	RS-4950	
Name			
Company			
Catalog Number			
Comments			
Tissue Preparation			
Trypsin (2.5%)	Gibco	15-090-046	
Trypsin-EDTA (0.25%)	Gibco	25-200-072	
Swinnex Filter Holder, 25 mm	EMD Millipore	SX0002500	Used as cell strainer. Assemble first with filter and autoclave
Isoflorane	Pharmaceutical Partners of Canada Inc.	CP0406V2	
Hemocytometer	Hausser Scientific	1492	
Grade 105 Lens Cleaning Tissue	GE Healthcare	2105-841	Used as cell strainer. Assemble first in filter holder and autoclave
Glass Pasteur pipettes with cotton filter	VWR	14672-412	
HEPES (1 M)	Gibco	15-630-080	
Hank's Balanced Salt Solution without Calcium, Magnesium, Phenol Red (HBSS, 10x)	Gibco	14-185-052	
Glass Pasteur pipettes	VWR	14672-380	
Deoxyribonuclease I from bovine pancreas (Dnase)	Sigma-Aldrich	DN25-100mg	
Butane bunsen burner	Wall-Lenk Mfg. Co.	Model 65	
Centrifuge	Eppendorf	5810R	
Name			
Company			
Catalog Number			
Comments			
Tissue Culture			
Penicillin-Streptomycin (10,000 U/mL)	Gibco	15-140-122	
Petri Dish (100 mm)	Fisher	FB0875712	
Petri Dish (60 mm)	Fisher	FB0875713A	
Horse Serum	Gibco	16050-122	Can be used in place of BGS, but each lot must be tested due to

			inter-lot variation. Heat-inactivation of serum is recommended.
Sodium Hydroxide	Fisher Scientific	S318-1	
Sodium Pyruvate	Sigma-Aldrich	P2256	
Minimum Essential Medium (MEM)	Gibco	11-095-080	
Neurobasal Medium	Gibco	21-103-049	
L-Glutamine (200 mM)	Gibco	25-030-081	
GlutaMAX Supplement	Gibco	35050061	Can be used in place of L-Glutamine in the NBG medium
Culture Dish (60 mm)	Corning, Inc	353002	
Culture Flasks (75 cm ²)	Greiner Bio-One	658170	
Cytarabine (Ara-C)	Sigma-Aldrich	C3350000	
D-(+)-Glucose	Sigma-Aldrich	G8270	
Bovine Growth Serum (BGS)	HyClone	SH3054103	Heat-inactivation is recommended before use.
B27 Supplement (50x)	Gibco	17-504-044	
Dimethyl Sulfoxide (DMSO)	Sigma-Aldrich	D8418-100ml	
Cryogenic Vials	VWR	89094-806	
DL-2-Amino-5-phosphonopentanoic acid (APV)	Sigma-Aldrich	A5282	
Name	Company	Catalog Number	Comments
Coverslip Preparation			
Sodium tetraborate decahydrate (borax)	Sigma-Aldrich	B9876-1KG	
Poly-L-Lysine Hydrobromide	Sigma-Aldrich	P2636	
Histoplast Paraffin Wax	Fisher	22-900-700	
Gravity Convection Oven	VWR	89511-404	Used for alternative coverslip cleaning method discussed in protocol
Ultrasonic Bath (Sonicator)	Fisher Scientific	15337400	
Nitric Acid	Anachemia	62786-460	
Ceramic Staining Racks	Thomas Scientific	8542E40	Used for alternative coverslip cleaning method discussed in protocol
Coverslips	Glaswarenfabrik Karl Hecht GmbH	1001/18	Manufacturer is very important, as neurons do not adhere well to lower quality glass
Boric Acid	Sigma-Aldrich	B0252	
Name	Company	Catalog Number	Comments
Miscellaneous			
Sterile Syringe Filters	VWR	28145-477	Used with BD syringe for filter-sterilization
Syringe	BD	302832	Used with VWR sterile syringe filters for filter-sterilization
Water Bath	Fisher Scientific	15-460-16Q	
Inverted Microscope	Olympus	CKX41	
15 mL Conical Sterile Centrifuge Tubes	ThermoScientific	339650	
50 mL Conical Sterile Centrifuge Tubes	ThermoScientific	339652	