

Materials List for:

Improved 3D Hydrogel Cultures of Primary Glial Cells for *In Vitro* Modelling of Neuroinflammation

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Materials

Name	Company	Catalog Number	Comments
1. Materials for HAMA synthesis and photopolymerization			
Hyaluronic acid (HA)	Sigma-Aldrich	53747-10G	Streptococcus equi, MW: 1.5 - 1.8 X 10 ⁶
Methacrylic anhydride (MA)	Sigma-Aldrich	275585-100ML	
Sodium hydroxide (NaOH)	Sigma-Aldrich	221465-25G	
Ethanol (EtOH)	Commerical Alcohols Inc.		Anhydrous
Phosphate buffered saline (pH 7.4) tablets	Fisher Scientific	18912014	
Triethanolamine (TEA)	Sigma-Aldrich	90279-100ML	
1-Vinyl-2pyrrolidinone (NVP)	Sigma-Aldrich	V3409-5G	
EosinY (EY)	Sigma-Aldrich	E6003-25G	
Polydimethylsiloxane (PDMS) Sylgard 184 Silicone Elastomer Kit	Dow Corning		
3-(Trimethoxysilyl)propyl methacrylate	Sigma-Aldrich	440159-100ML	
Beaker (100 mL)	Corning	1000-100	
Beaker (500 mL)	Corning	1000-600	
pH paper (Labstick)	Sigma-Aldrich	9580	
Name Company Catalog Number Comments			
2. Materials for glial cell isolation and cell culture			
P1-2 Sprague Dawley rat pups	Charles River	CD Sprague Dawley rat strain code 001	
Dissector scissors - slim blades (small)	Fine Science Tools	14081-09	
Surgical scissors - Toughcut (large)	Fine Science Tools	14130-17	
Fine forceps (Dumont #5)	Fine Science Tools	11521-10	
Curved fine forceps (Dumont #7)	Fine Science Tools	11271-30	
Hank's balanced salt solution (HBSS)	Gibco	14170-112	
Dulbecco's modified Eagle's medium and Ham's nutrient mixture F-12 (DMEM/F12)	Gibco	11320-033	

Penicillin-streptomycin (PS)	Gibco	15140-122	
Fetal bovine serum (FBS)	Gibco	12483-020	
0.25% Trypsin-ethylenediaminetetraacetic acid (EDTA)	Gibco	25200-072	
Poly-L-lysine (PLL)	Sigma-Aldrich	P-6282	
50 mL conical centrifuge tube	Fisher Scientific	05-539-13	
15 mL conical centrifuge tube	Fisher Scientific	05-539-5	
12 well Tissue culture treated plates (Cellstar)	Greiner Bio-One	665 108	
10 mL serological pipette	Fisher Scientific	13-676-10F	
25 mL serological pipette	Fisher Scientific	12-676-10K	
Petri dish (60 mm X 15 mm)	Fisher Scientific	FB0875713A	
Petri dish (100 mm X 15 mm)	Fisher Scientific	FB0875712	
Microscope Coverslip (18 mm)	Fisher Scientific	12-545-100 18CIR	
Name	Company	Catalog Number	Comments
3. Materials for microscopy (confocal and scanning electron microscopy)			
Mouse monoclonal anti-CNPase	abcam	ab6319	
Rabbit anti-Iba1	Wako Laboratory Chemicals	019-17741	
Chicken anti-GFAP	abcam	ab4674	
Hoechst 33342	Fisher Scientific	62249	
Fluoromount-G	Fisher Scientific	00-4958-02	
Formalin	Sigma Aldrich	HT501128-4L	Buffered (10%)
Triton X-100	Fisher Scientific	BP151-500	
Horse Serum	Gibco	16050-122	
Paraformaldehyde	Electon Microscopy Sciences	157-8	Buffered (8%)
Gutraldehyde	Electon Microscopy Sciences	16019	Buffered (8%)
Osmium tetroxide	Electon Microscopy Sciences	19152	Buffered (2%)
Hexamethyldilazane (HMDS)	Electon Microscopy Sciences	16700	
Ethanol (EtOH)	Electon Microscopy Sciences	15055	Anhydrous
Microscope Slide (25 X 75 X 1 mm)	VWR International	48311-703	