

Materials List for:

Alginate Microcapsule as a 3D Platform for Propagation and Differentiation of Human Embryonic Stem Cells (hESC) to Different Lineages

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Materials

Name	Company	Catalog Number	Comments
Alginate (Pronova UP MVG)	NovaMatrix	4200101	high glucuronic acid content ≥60%, viscosity >200 mPa s, and endotoxin ≤100 EU/g
Gelatin	Sigma-Aldrich	G1890-100G	
0.9% NaCl	Baxter International Inc.	AHF7123	
Type J1 bead generator	Nisco engineering Inc	SPA-0447	
Multi-Phaser syringe pump	New Era	Model NE-1000	
Ezi-Flow Medical Flowmeter	Gascon Systems	G0149	
Y-27632	Merck & Co., Inc.	688000	
Human Serum Albumin	Sigma-Aldrich	A4327-1G	
Accutase	EMD Millipore	SCR005	
14G x 2" I.V. catheter	Terumo Medical Corp.	SR-OX1451C	
Knockout-DMEM	Invitrogen	10829-018	For SR medium (basal)
GlutaMAX -I	Invitrogen	35050-061	For SR medium (2 mM)
Knockout Serum Replacement	Invitrogen	10828-028	For SR medium (20%)
Penicillin-Streptomycin	Invitrogen	15070063	For SR medium (2.5 U/ml)
Insulin-Transferrin-Selenium (ITS)	Invitrogen	41400045	For SR medium (1x)
β-Mercapt-ethanol	Invitrogen	21985-023	For SR medium (0.1 mM)
MEM NEAA Solution	Invitrogen	11140-050	For SR medium (5 mM)
Glasgow Minimum Essential Medium	Invitrogen	11710035	For DA neural differentiation medium (basal)
Knockout Serum Replacement	Invitrogen	10828-028	For DA neural differentiation medium (10%)
Sodium pyruvate	Invitrogen	11360070	For DA neural differentiation medium (1 mM)
MEM NEAA Solution	Invitrogen	11140-050	For DA neural differentiation medium (0.1 mM)
β-Mercapt-ethanol	Invitrogen	21985-023	For DA neural differentiation medium (0.1 mM)
Sonic hedgehog (SHH)	R&D Systems	1314-SH-025/CF	For DA neural differentiation (100 ng/ml)
Fibroblast growth factor 8a (FGF8a)	R&D Systems	4745-F8-050	For DA neural differentiation (100 ng/ml)