

Materials List for:

Production of Elastin-like Protein Hydrogels for Encapsulation and Immunostaining of Cells in 3D

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Materials

Name	Company	Catalog Number	Comments
Elastin-Like Protein Expression and Purification			
10 cm Petri Dishes	Thermo Fisher Scientific	FB0875713	
70% Ethanol	RICCA Chemical	2546.70-1	
Ammonium Sulfate	Sigma-Aldrich	A3920-500G	
Ampicillin	Thermo Fisher Scientific	BP1760-25G	
Bacto Agar	Thermo Fisher Scientific	9002-18-0	
BL21(DE3)pLysS Competent Cells	Invitrogen	C606003	
Chloramphenicol	Amresco	0230-100G	
Deoxyribonuclease I from bovine pancreas	Sigma-Aldrich	DN25	
EDTA disodium salt, dihydrate	Thermo Fisher Scientific	O2793-500	
Glycerol	Thermo Fisher Scientific	BP229-4	
Isopropanol	Thermo Fisher Scientific	A451-4	
Isopropyl β -D-1-thiogalactopyranoside (IPTG)	Thermo Fisher Scientific	BP1755-10G	
Luria Broth	EMD Millipore	1.10285.5007	
Parafilm	VWR	52858-000	
Phenylmethanesulfonyl fluoride (PMSF)	MP Biomedicals	195381	
Sodium Chloride	Thermo Fisher Scientific	BP358-212	
Sodium Hydroxide	Sigma-Aldrich	S 8045-1KG	
Syringe Filter Unit (0.22 μ m)	Millipore	SLGP033RB	
Terrific Broth	Millipore	71754-4	
Tris Base	Thermo Fisher Scientific	BP152-1	
Cell Encapsulation in 3D ELP Hydrogels			
0.22 μ m syringe filters	Millipore	SLGV004SL	
0.5 mm thick silicone sheet	Electron Microscopy Science	70338-05	
24-well tissue culture plates	Corning	353047	
Disposable Biopsy Punch (2 mm)	Integra Miltex	33-31	
Disposable Biopsy Punch (4 mm)	Integra Miltex	33-34	
Disposable Biopsy Punch (5 mm)	Integra Miltex	33-35	

Dulbecco's phosphate buffered saline (DPBS)	Corning	21-031-CM	
No. 1 12 mm glass coverslips	Thermo Fisher Scientific	12-545-80	
Tetrakis(hydroxymethyl)phosphonium chloride (THPC)	Sigma-Aldrich	404861-100ML	
0.5% Trypsin/EDTA	Thermo Fisher	15400054	
Immunocytochemistry of Cells in 3D ELP Hydrogels			
16% (w/v) Paraformaldehyde (PFA)	Electron Microscopy Sciences	15701	
Bovine Serum Albumin (BSA)	Roche	3116956001	
DAPI (4',6-Diamidino-2-Phenylindole, Dihydrochloride)	Molecular Probes	D1306	
Donkey Serum	Lampire Biological Labs	7332100	
Goat anti-mouse Secondary Antibody (AF488)	Molecular Probes	A-11017	
Goat anti-rabbit Secondary Antibody (AF546)	Molecular Probes	A-11071	
Goat Serum	Gibco	16210-072	
Mouse Nestin Primary Antibody	BD Pharmingen	556309	
Mouse Sox2 Primary Antibody	Cell Signaling Technology	23064S	
Nail Polish	Electron Microscopy Sciences	72180	
Triton X-100	Sigma-Aldrich	X100-100ML	
Vectashield Hardset Mounting Medium	Vector Labs	H-1400	