

Materials List for:

Fabrication of a Biomimetic Nano-Matrix with Janus Base Nanotubes and Fibronectin for Stem Cell Adhesion

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Materials

Name	Company	Catalog Number	Comments
1,2-dichloroethane	Alfa Aesar	39121	
2-cyanoacetic acid	Sigma-Aldrich	C88505	
4-Dimethylaminopyridine	TCI America	D1450	
8 wells Chambered Coverglass	Thermo Fisher	155409	
96-well plate	Corning	353072	
absolute ethanol	Thermo Fisher	BP2818500	
acetone	Sigma-Aldrich	179124	
acetonitrile	Sigma-Aldrich	34851	
allylamine	Sigma-Aldrich	145831	
Basic Plasma Cleaner	Harrick Plasma	PDC32G	
citric acid	Sigma-Aldrich	251275	
concentrated hydrochloric acid	Sigma-Aldrich	H1758	
Deionized water	Thermo Fisher	15230147	
dichloromethane	Sigma-Aldrich	270997	
diethyl ether	Sigma-Aldrich	296082	
Di-tert-butyl dicarbonate	Sigma-Aldrich	361941	
ethyl acetate	Sigma-Aldrich	319902	
ethylcarbamate	Sigma-Aldrich	U2500	
Fibronectin	Thermo Fisher	PHE0023	
Fixative Solution (4 % formaldehyde prepared in PBS)	Thermo Fisher	R37814	
guanidinium hydrochloride	Alfa Aesar	A13543	
hexanes	Sigma-Aldrich	227064	
Human mesenchymal stem cells	Lonza	PT-2501	
methanol	Sigma-Aldrich	34860	
methyl iodide	Sigma-Aldrich	289566	
N,N-Diisopropylethylamine	Alfa Aesar	A17114	
N,N-dimethylformamide	Sigma-Aldrich	227056	
N-Methylmorpholine N-oxide	Alfa Aesar	A19802	
Osmium tetroxide	Alfa Aesar	45385	
Penicillin-Streptomycin	Thermo Fisher	15140163	
Phosphate Buffer Solution	Thermo Fisher	20012050	
phosphoryl chloride	Sigma-Aldrich	201170	
potassium carbonate	Sigma-Aldrich	347825	

reverse phase column	Thermo Fisher	25305-154630	
Rhodamine Phalloidin	Thermo Fisher	R415	
silica gel	TCI America	S0821	
sodium bicarbonate	Sigma-Aldrich	S6014	
sodium ethoxide	Alfa Aesar	L13083	
sodium periodide	Sigma-Aldrich	71859	
sodium sulfate	Sigma-Aldrich	239313	
sodium sulfite	Sigma-Aldrich	S0505	
sodium triacetoxyborohydride	Alfa Aesar	B22060	
spectrophotometer(NanoDrop One/One ^c UV-Vis)	Thermo Fisher	ND-ONE-W	
Stem Cell Growth Medium BulletKit	Lonza	PT-3001	
tetrahydrofuran	Sigma-Aldrich	401757	
thioanisole	Sigma-Aldrich	T28002	
toluene	Sigma-Aldrich	179418	
triethylamine	Alfa Aesar	A12646	
trifluoroacetic acid	Alfa Aesar	A12198	
Triton X-100	Thermo Fisher	HFH10	
Trypsin-EDTA solution	Thermo Fisher	25200056	