

Materials List for

Direct and Indirect Culture Methods for Studying Biodegradable Implant Materials *In Vitro*

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Materials

Name	Company	Catalog Number	Comments
10 mL serological pipette	VWR	490019-704	
12-well tissue-culture-treated plates	Thermo Fisher Scientific	353043	
15 mL conical tube (Polypropylene)	VWR	89039-666	
18 G needle	BD	305196	
25½ G needle	BD	305122	
4',6-diamidino-2- phenylindole dilactate (DAPI)	Invitrogen	D3571	
50 mL conical tube (Polypropylene)	VWR	89039-658	
70 µm nylon strainer	Fisher Scientific	50-105-0135	
Alexa Flour 488-phalloidin	Life technologies	A12379	
Biological safety cabinet	LABCONCO	Class II, Type A2	
Centrifuge	Eppendorf	Rotor F-35-6-30, Centrifuge5430	
Clear Fused Quartz Round Dish	AdValue Technology	FQ-4085	
CO ₂ incubator	SANYO	MCO-19AIC	
CoolCell Freezer Container	Corning	432000	foam container designed to regulate temperature decrease
Cryovial	Thermo Fisher Scientific	5000-1020	
Dimethyl Sulfoxide (DMSO)	Sigma-Aldrich	472301	
Dulbecco's modified Eagle's medium (DMEM)	Sigma-Aldrich	D5648	
EDX analysis software	Oxford Instruments	AztecSynergy	
Energy dispersive X-ray spectroscopy (EDX)	FEI	50mm ² X-Max50 SDD	
Fetal bovine serum (FBS)	Thermo Fisher Scientific Inc.	SH30910	
Fluorescence microscope	Nikon	Eclipse Ti	
Formaldehyde	VWR	100496-496	
Hemocytometer	Hausser Scientific	3520	

ImageJ software	National Institutes of Health and the Laboratory for Optical and Computational Instrumentation (LOCI, University of Wisconsin)		
Inductively coupled plasma optical emission spectrometry (ICP-OES)	PerkinElmer	Optima 8000	
Optical microscope	VWR	VistaVision	
Penicillin/streptomycin (P/S)	Thermo Fisher Scientific, Inc.,	15070063	
pH meter	VWR	model SB70P	
Phosphate Buffered Saline (PBS)	VWR	97062-730	
Scanning electronic microscope (SEM)	FEI	Nova NanoSEM 450	
surgical blade	VWR	76353-728	
Tissue Culture Flasks	VWR	T-75, MSPP-90076	
Transwell inserts	Corning	3460	
Trypsin-ethylenediaminetetraacetic acid solution (Trypsin-EDTA)	Sigma-Aldrich	T4049	
X-ray diffraction instrument (XRD)	PANalytical	Empyrean Series 2	