

Materials List for

# Accessing the Cytotoxicity and Cell Response to Biomaterials

Anabela Baptista Paula<sup>\*1,2,3,4</sup>, Mafalda Laranjo<sup>\*2,3,4,5</sup>, Ana Sofia Coelho<sup>1,2,3,4</sup>, Ana Margarida Abrantes<sup>2,3,4,5</sup>, Ana Cristina Gonçalves<sup>2,3,4,6</sup>, Ana Bela Sarmento-Ribeiro<sup>2,3,4,6</sup>, Manuel Marques Ferreira<sup>2,3,4,7</sup>, Maria Filomena Botelho<sup>2,3,4,5</sup>, Carlos Miguel Marto<sup>1,2,3,4,8</sup>, Eunice Carrilho<sup>1,2,3,4</sup>

<sup>1</sup>Institute of Integrated Clinical Practice, Faculty of Medicine, University of Coimbra, Coimbra, Portugal    <sup>2</sup>Coimbra Institute for Clinical and Biomedical Research (iCBR) area of Environment Genetics and Oncobiology (CIMAGO), University of Coimbra, Coimbra, Portugal    <sup>3</sup>Center for Innovative Biomedicine and Biotechnology (CIBB), University of Coimbra, Coimbra, Portugal    <sup>4</sup>Clinical Academic Center of Coimbra, CACC, Portugal    <sup>5</sup>Institute of Biophysics, Faculty of Medicine, University of Coimbra, Coimbra, Portugal    <sup>6</sup>Laboratory of Oncobiology and Hematology, Faculty of Medicine, University of Coimbra, Coimbra, Portugal    <sup>7</sup>Institute of Endodontics, Faculty of Medicine, University of Coimbra, Coimbra, Portugal    <sup>8</sup>Institute of Experimental Pathology, Faculty of Medicine, University of Coimbra, Coimbra, Portugal

\* These authors contributed equally

## Corresponding Author

Anabela Baptista Paula

anabelabppaula@sapo.pt

## Citation

Paula, A.B., Laranjo, M., Coelho, A.S., Abrantes, A.M., Gonçalves, A.C., Sarmento-Ribeiro, A.B., Ferreira, M.M., Botelho, M.F., Marto, C.M., Carrilho, E. Accessing the Cytotoxicity and Cell Response to Biomaterials. *J. Vis. Exp.* (173), e61512, doi:10.3791/61512 (2021).

## Date Published

July 8, 2021

## DOI

10.3791/61512

## URL

jove.com/video/61512

## Materials

Name	Company	Catalog Number	Comments
Absolute ethanol	Merck Millipore	100983	
Accutase	Gibco	A1110501	StemPro Accutase Cell Dissociation Reagent
ALDH antibody	Santa Cruz Biotechnology	SC166362	
Annexin V FITC	BD Biosciences	556547	
Antibiotic antimycotic solution	Sigma	A5955	
BCA assay	Thermo Scientific	23225	Pierce BCA Protein Assay Kit
Bovine serum albumin	Sigma	A9418	
CaCl <sub>2</sub>	Sigma	10035-04-8	
CD133 antibody	Miteny Biotec	293C3-APC	Allophycocyanin (APC)
CD24 antibody	BD Biosciences	658331	Allophycocyanin-H7 (APC-H7)
CD44 antibody	Biolegend	103020	Pacific Blue (PB)
Cell strainer	BD Falcon	352340	40 µM
Collagenase, type IV	Gibco	17104-019	
cComplete Mini	Roche	118 361 700 0	
DAB + Chromogen	Dako	K3468	
Dithiothreitol	Sigma	43815	
DMEM-F12	Sigma	D8900	
DNase I	Roche	11284932001	
DSP (M-20) Antibody, 1: 100	Santa Cruz Biotechnology	LS-C20939	

ECC-1	ATCC	CRL-2923	Human endometrium adenocarcinoma cell line
Epidermal growth factor	Sigma	E9644	
Hepes 0.01 M	Sigma	MFCD00006158	
Fibroblast growth factor basic	Sigma	F0291	
Giemsa Stain, modified GS-500	Sigma	MFCD00081642	
Glycerol	Dako	C0563	
Haemocytometer	VWR	HERE1080339	
HCC1806	ATCC	CRL-2335	Human mammary squamous cell carcinoma cell line
Insulin, transferrin, selenium Solution	Gibco	41400045	
May-Grünwald Stain MG500	Sigma	MFCD00131580	
MCF7	ATCC	HTB-22	Human mammary adenocarcinoma cell line
Methylcellulose	AlfaAesar	45490	
NaCl	JMGS	37040005002212	
Polyclonal Rabbit Anti-goat immunoglobulins / HRP, 1: 100	Dako	G-21234	
Poly(2-hydroxyethyl-methacrylate	Sigma	P3932	
Putrescine	Sigma	P7505	
RL95-2	ATCC	CRL-1671	Human endometrium carcinoma cell line
Sodium deoxycholic acid	JMS	EINECS 206-132-7	
Sodium dodecyl sulfate	Sigma	436143	
Substrate Buffer	Dako	926605	
Tris	JMGS	20360000BP152112	
Triton-X 100	Merck	108603	
Trypan blue	Sigma	T8154	
Trypsin-EDTA	Sigma	T4049	
$\beta$ -actin antibody	Sigma	A5316	