

Materials List for

Mammary Epithelial and Endothelial Cell Spheroids as a Potential Functional *In vitro* Model for Breast Cancer Research

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jove.com/video/62940

Materials

Name	Company	Catalog Number	Comments
100 mm × 20 mm tissue-culture treated culture dishes	Corning	CLS430167	
149MULTI0C1			
35 x 10 mm Tissue Culture Dish	Falcon	353001	
5 mL Serological Pipet, Polystyrene, Individually Packed, Sterile	Falcon	357543	
Adobe Photoshop			Version: 13.0.1 (64-bit)
Antibiotic Antimycotic Solution (100×)	Sigma-Aldrich	A5955	
Calcein-AM	Sigma-Aldrich	17783	
CD31 (cluster of differentiation 31)	Cell Marque	131M-95	monoclonal mouse ab clone JC70
CellTracker Green CMFDA (5-chloromethylfluorescein diacetate)	Invitrogen	C7025	
CK8/18 (cytokeratins 8 and 18)	DBS	Mob189-05	monoclonal mouse ab, clone 5D3
CKX41 Inverted Microscope	Olympus Life Science		Olympus DP27 digital camera
Cleaved Caspase 3	Cell Signaling	9661L	polyclonal rabbit ab
Collagen (rat tail)	Roche	11 179 179 001	
Coulter ISOTON II Diluent	Beckman Coulter	844 80 11	Diluent II
Coulter Z1, Cell Counter	Coulter Electronics, Luton, UK		
Dehydrated Culture Media: Noble Agar	BD Difco	BD 214220	
Dermal Microvascular Endothelial Neonatal, Pooled Donors (HMVEC-DNeo)	Lonza	CC-2516	
Dimethyl sulfoxide (DMSO)	Sigma-Aldrich	D2650	

Dulbecco's Modified Eagle's Medium/ Nutrient Mixture F-12 Ham	Sigma-Aldrich	D6434	
EBM-2 Endothelial Cell Growth Basal Medium-2	Lonza	190860	
Ethidium homodimer	Sigma-Aldrich	46043	
Fetal Calf Serum (FCS)	Thermo Fisher Scientific	SH30070	
Fetal Calf Serum Charcoal Stripped (FCS sf)	Thermo Fisher Scientific	SH3006803	
Fluorescence stereo microscopes Leica M205 FA	Leica Microsystems		
GlutaMAX Supplement (100x)	Gibco	35050038	
HBSS, no calcium, no magnesium, no phenol red	Gibco	14175053	
Hoechst 33342	Life Technologies	H3570	
HUVEC – Human Umbilical Vein Endothelial Cells	Lonza	CC-2517	
ImageJ	National Institute of Health, USA		Wayne Rasband Version: 1.52a (64-bit)
Ki67	Cell Marque	275R-16	monoclonal rabbit ab, clone SP6
Leica fully motorized fluorescence stereo microscope	Leica Microsystems	M205 FA	
Leica Histocore Multicut Rotary Microtome		149MULTI0C1	
Low Serum Growth Supplement Kit (LSGS Kit)	Gibco	S003K	
MCF-7 cells – human breast adenocarcinoma cell line	Clinic for Gynecology, University Hospital Zurich		Provided from Dr André Fedier obtained from ATCC
Nunclon Sphera 96U-well plate	Thermo Fisher Scientific	174925	
Paraformaldehyde (PFA)	Sigma-Aldrich	P6148	
Phosphate-buffered saline (PBS) 1x	Gibco	10010015	
Pierce BCA Protein Assay Kit	Thermo Scientific	23225	
Protein Lysis Buffer	Cell Signaling, Danvers, USA	9803	
Quick-RNA Miniprep Kit	Zymo Research	R1055	
RNA Lysis Buffer	Zymo Research	R1060-1-100	Contents in Quick-RNA Miniprep Kit
Rotina 46R Centrifuge	Hettich		
Round-Bottom Polystyrene Tubes, 5 mL	Falcon	352003	
Sonicator	Bandelin electronics, Berlin, DE		
Tecan Infinite series M200 microplate reader	Tecan, Salzburg, AU		
Tissue Culture Flasks 75	TPP	90076	
Trypsin-EDTA solution	Sigma-Aldrich	T3924	