

Materials List for:

High Throughput Traction Force Microscopy Using PDMS Reveals Dose-Dependent Effects of Transforming Growth Factor- β on the Epithelial-to-Mesenchymal Transition

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Materials

Name	Company	Catalog Number	Comments
Plate			
GEL-8100	Nusil Technology	GEL-8100	High Purity Dielectric, Soft Silicone Gel kit
Dow Corning Sylgard 184 Silicone Encapsulant Clear 0.5 kg Kit	Ellsworth Adhesives	184 SIL ELAST KIT 0.5KG	curing agent
Custom Cut Glass	Hausser Scientific Company		109.6mm \pm x 72.8mm \pm x 1mm thickness
Target 2TM Nylon Syringe Filter	ThermoFisher Scientific	F2513-4	
96-well Stripwell Egg Crate Strip Holder	Corning	2572	
Polystyrene Universal Microplate Lid With Corner Notch	Corning	3099	
Ethyl alcohol	Greenfield Global	P016EA95	0.95
2-Propanol	Sigma-Aldrich	190764	ACS reagent, \geq 99.5%
Surface Coating			
Sulfo-SANPAH Crosslinker	Proteochem	c1111-100mg	
Fibronectin bovine plasma	Sigma-Aldrich	F1141-1MG	solution, sterile-filtered, BioReagent, suitable for cell culture
PBS, 1X	Wisent	319-005-CL	pH 7.4, without calcium and magnesium
DMSO	Sigma-Aldrich	472301	
Cell Culture			
DMEM, 1X	Wisent	319-005-CL	4.5g/L glucose, with L-glutamine, sodium pyruvate and phenol red
FBS (Fetal Bovine Serum)	Wisent	080-150	Premium Quality, Endotoxin <1, Hemoglobin <25
HEPES	Wisent	330-050-EL	1M, free acid
Human Insulin Recombinant	Wisent	511-016-CM	USP grade
Penicillin-Streptomycin Solution	Wisent	450-201-EL	100 X, sterile filtered for cell culture
L-Glutamine solution	Wisent	609-065-EL	200mM solution, sterile filtered for cell culture
Amphotericin B	Wisent	450-105-QL	250 μ g/ml, sterile filtered for cell culture

Recombinant Human TGF- β 1	Peprtech	100-21	HEK293 Derived
Acetic acid	Sigma-Aldrich	537020	Glacial, \geq 99.85%
Citric acid	Sigma-Aldrich	251275	ACS reagent, \geq 99.5%
NMuMG	ATCC	CRL-1636	Mouse Mammary Gland Cell Line
Sodium azide	Fisher Scientific	AC190385000	99%, extra pure, ACROS Organics
Potassium hydroxide	Sigma-Aldrich	221473	ACS reagent, \geq 85%, pellets
TritonX-100	Sigma-Aldrich	X100	laboratory grade
Bead Synthesis			
1,1'-Dioctadecyl-3,3,3',3'-tetramethylindocarbocyanine perchlorate (DiI)	Sigma-Aldrich	468495-100MG	97%
Methyl methacrylate	Sigma-Aldrich	M55909-500ML	contains \leq 30 ppm MEHQ as inhibitor, 99%
Inhibitor Remover	Sigma-Aldrich	306312-1EA	Prepacked column for removing hydroquinone and monomethyl ether hydroquinone
Methacryloxypropyl Terminated Polydimethylsiloxane	Gelest	DMS-R31 (25,000g/mol)	Polydimethylsiloxane stabilizer, 25,000g/mol, 1,000 cSt
2,2'-Azobis(2-methylpropionitrile) (AIBN)	Sigma-Aldrich	441090-25G	98%
Hexane	Sigma-Aldrich	296090-2L	anhydrous, 95%
Hexane, mixture of isomers	Sigma-Aldrich	227064-1L	anhydrous, \geq 99%
Whatman qualitative filter paper, Grade 1	Sigma-Aldrich	WHA1001055	circles, diam. 55 mm,
Equipment			
Laurell WS-650Mz-23NPPB	Laurell Technologies		
UVP Handheld UV Lamp Model UVGL-58	VWR	21474-622	
Rheometer	Anton Paar	MCR 302 WESP	