

Materials List for:

Ultrathin Porated Elastic Hydrogels As a Biomimetic Basement Membrane for Dual Cell Culture

Amanda S. Pellowe¹, Holly M. Lauridsen¹, Rita Matta¹, Anjelica L. Gonzalez¹

¹Biomedical Engineering, Yale University

Correspondence to: Anjelica L. Gonzalez at anjelica.gonzalez@yale.edu

URL: <https://www.jove.com/video/56384>

DOI: [doi:10.3791/56384](https://doi.org/10.3791/56384)

Materials

Name	Company	Catalog Number	Comments
1M Hydrogel Chloride (HCl)	EMD	HX0603-75 2.5L	Sterile. Use in fume hood with eye protection and gloves.
1X PBS	Gibco	14040-133 500 mL	None
Zinc Nitrate Hexahydrate (Zn(NO ₃) ₂ •6H ₂ O)	Sigma-Aldrich	228737-500g	Use with eye protection and gloves.
Sodium Hydroxide (NaOH)	Macron Chemicals	278408-500g	Use with eye protection and gloves.
Zinc Acetate Dihydrate ((CH ₃ O ₂) ₂ Zn ²⁺ •2H ₂ O)	Fisher Scientific	AC45180010 1 kg	Use with eye protection and gloves.
Methanol (CH ₃ OH)	J.T. Baker	9070-05 4L	Use in fume hood with eye protection and gloves.
VWR Life Science Seradigm Premium Grade FBS	VWR	97068-085	Sterile filter. 5 mL FBS in 45 mL PBS
Mineral oil	CVS	PLD-B280B	None
Round bottom flask	ChemGlass		N/A
Thermometer			N/A
Stir bar			N/A
Plain precleaned microscope slides 3"x1"x1" mm thick	Thermo Scientific	420-004T	Spray with ethanol and let dry prior to use.
Glass pasteur pipets			N/A
1 mL rubber bulbs			N/A
Plastic 100 mm petri dishes			N/A
Sterile forceps			N/A
Silicone isolators			0.8 mm thick
Polydimethylsiloxane (PDMS) punches			N/A
Glass bottles			N/A
6 well plates	Cellstar	657 160	N/A
Filter Paper	Whatman	8519	N/A
Stirrer-hot plate	VWR Dya-Dual	12620-970	Use with eye protection and gloves.
2,2-Dimethoxy-2-phenylacetophenone (C ₆ H ₅ COC(OCH ₃) ₂ C ₆ H ₅)	Sigma-Aldrich	24650-42-8	Use with eye protection and gloves.
1-Vinyl-2-pyrrolidone (C ₆ H ₉ NO)	Aldrich		Use with eye protection and gloves.
Polyethylene Glycol 10,000 (H(OCH ₂ CH ₂) _{10,000} OH)	Fluka	81280-1kg	Use with eye protection and gloves.

RGDS	Life Tein	180190	Use with eye protection and gloves.
Blak-Ray long wave UV lamp	UVP	Model B 100AP	N/A
Eppendorf tubes	USA Scientific	1615-5500	N/A