

Materials List for:

# Epithelial Cell Repopulation and Preparation of Rodent Extracellular Matrix Scaffolds for Renal Tissue Development

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## Materials

Name	Company	Catalog Number	Comments
Reagents			
TRITON X-100, Proteomics Grade, AMRESCO	VWR	M143-4L	
Sodium dodecyl sulfate solution, BioUltra, for molecular biology, 20% in H <sub>2</sub> O	Sigma-Aldrich	05030	
Peracetic acid solution, purum, ~ 39% in acetic acid (RT)	Sigma-Aldrich	77240	Peracetic is flammable and corrosive. Prepare within a fume hood using appropriate personal protective equipment (e.g. gloves, goggles).
200 proof ethanol	VWR	V1001TP	
Sigmacote, siliconizing reagent for glass and other surfaces	Sigma-Aldrich	SL2	For treatment of bioreactor reservoirs. Referred to in text as siliconizing reagent.
DMEM/F12 media	Life Technologies	11320-033	
Corning cellgro Fetal Bovine Serum Premium, Mediatech	Corning	35-010-CV	
Penicillin-Streptomycin Solution, 100X 10,000 I.U. Penicillin 10,000 µg/mL Streptomycin	Corning	30-002-CI	
TrypLE Express (1X), Phenol Red	Life Technologies	12605-028	Referred to in text as cell dissociating enzyme.
Trypan Blue Stain (0.4%)	Life Technologies	15250-061	
Resazurin sodium salt	Sigma-Aldrich	R7017	
Equipment:			
Masterflex L/S Digital Drive, 600 RPM, 115/230 VAC	Cole-Parmer	EW-07522-20	
Masterflex L/S large cartridges for 07519-05 and -06 pump heads.	Cole-Parmer	EW-07519-70	Referred to in text as large pump cartridge.
Masterflex L/S 8-channel, 4-roller cartridge pump head.	Cole-Parmer	EW-07519-06	

Straight 6" specimen forceps, serrated	VWR	82027-438	
*Kidney perfusion bioreactor	WilMad Labglass	*Custom designs	Bioreactors are produced as described by WilMad Labglass. The designs have been described in depth in a previous publication.
Perfusion Circuit Components			
24 G x 0.75 in. BD Insyte Autoguard shielded IV catheter (0.7 mm x 19 mm) made of BD Vialon biomaterial. Has notched needle. (50/sp, 200/ca)	BD Biosciences	381412	Referred to in text as 24 gauge catheter.
Masterflex PharMed BPT Tubing, L/S #14, 25'	Cole-Parmer	HV-06508-14	Referred to in text as peristaltic pump tubing.
Peroxide-Cured Silicone Tubing, 1/16" ID X 1/8" OD, 25 ft/pack	Cole-Parmer	HV-06411-62	Referred to in text as 1/16" ID silicone rubber tubing.
Masterflex platinum-cured silicone tubing, L/S 14, 25 ft.	Cole-Parmer	HV-96410-14	Referred to in text as thick-walled 1/16" ID silicone rubber tubing.
VWR Silicone Tubing, 1/4" ID x 0.5" OD	VWR	89068-484	
Acro 50 Vent Filters, Pall Life Sciences	VWR	28143-558	Referred to in text as 0.2 micron vent filter.
Cole-Parmer Luer Adapters, Male Luer Lock to 1/8" ID, Nylon, 25/pk	Cole-Parmer	T-45505-11	Referred to in text as male Luer lock to 1/8" barbed adapter.
Cole-Parmer Luer Accessory, Male Luer Plug, Nylon, 25/pk	Cole-Parmer	EW-45505-58	
Female luer x female luer adapter, Nylon, 25/pk	Cole-Parmer	EW-45502-22	Referred to in text as female Luer x female Luer adapter.
Cole-Parmer Luer Accessory, Female Luer Cap, Nylon, 25/pk	Cole-Parmer	EW-45502-28	
Smiths Medical Large Bore Hi-Flo Stopcocks # MX4311L - 3-Way Hi-Flo Stopcock with Extended Male Luer Lock, Non-DEHP Formulation, Latex Free (LF), Lipid Resistant, Non-PVD, 50/cs	Careforde Healthcare	10254821	Smiths Medical (vendor) catalogue number is #MX4311L.
Other Components			
5 ml BD Luer-Lok disposable syringe with BD Luer-Lok™ tip.	BD Biosciences	309646	
35 mm x 10 mm Easy Grip Culture Dish	BD Biosciences	353001	Used to draw cell suspension into syringe for cell seeding.