

Materials List for:

Three-Dimensionally Printed Microfluidic Cross-flow System for Ultrafiltration/ Nanofiltration Membrane Performance Testing

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Materials

Name	Company	Catalog Number	Comments
BSA	SIGMA-ALDRICH	A6003	
NaCl	DAEJUNG	7548-4100	
MgSO ₄	EMSURE	1058861000	
NF Membrane	Filmtec	NF200	
30 kDa UF Membrane	MICRODYN NADIR	UH030	
50 kDa UF Membrane	MICRODYN NADIR	UH050	
Pressure Transducer	Midas	43006711	
Ball Valves	AV-RF	Q91SA-PN6.4	
3-way Valve	iLife Medical Devices	902.071	
Pressure Regulator	Swagelok	KCB1G0A2A5P20000	
Flow-meter	Bronkhorst	L01-AGD-99-0-70S	
Balances	MRC	BBA-1200	
Pump	Cole-Parmer	EW-00354-JI	
1/8" Tubing	Cole-Parmer	EW-06605-27	
1/16" Tubing	Cole-Parmer	EW-06407-41	
1/16" Fittings	Cole-Parmer	EW-30486-70	
1/8" Fittings	Kiowa	QSM-B-M5-3-20	
Microcontroller	Adafruit	50	Arduino UNO R3
Continuous Rotation Servo	Adafruit	154	
Standard Servo	Adafruit	1142	
Power Supply	Adafruit	658	
Servo Shield	SainSmart	20-011-905	
Switches	Parts Express	060-376	
0.45 Micron Filters	EMD Millipore	SLHV033RS	
Potentiostat	Gamry	PCI4	
Sonicator	MRC	DC-150H	
Connex 3D Printer	Stratasys	Objet Connex	
Veroclear	Stratasys	RGD810	transparent polymer for printing flow cell
Tangoblack-plus	Stratasys	FLX980	soft rubbery polymer for gasket layers on flow cell