

Materials List for:

Capture and Release of Viable Circulating Tumor Cells from Blood

Siddarth Rawal¹, Zheng Ao², Ashutosh Agarwal^{1,3}

¹Department of Pathology, University of Miami

²SRI International

³Department of Biomedical Engineering, DJTMF Biomedical Nanotechnology Institute at the University of Miami, University of Miami

Correspondence to: Ashutosh Agarwal at a.agarwal2@miami.edu

URL: <https://www.jove.com/video/54435>

DOI: [doi:10.3791/54435](https://doi.org/10.3791/54435)

Materials

Name	Company	Catalog Number	Comments
Slot Filter	Circulogix Inc.	MSF-01	Different size filters available based for filtration for CTC from blood or urine (www.circulogixinc.com)
poly(<i>N</i> -iso-propylacrylamide) (PIPAAm)	Ploysciences Inc.	21458	Non-Hazardous. Store at room temp.
1-Butanol	Sigma Aldrich	B7906	Use in well ventilated area
Plastic Microscope Slides	Cole-Parmer	48510-30	Any plastic slides or alternatively any sort of square (Metal, Acrylic etc.) can be used if it will be bale to hold the 8mmx8mm filter square
Spin Coater	Specialty Coating Systems	SCS G3 Spin Coater	Instrument
Polyimide Tape	Uline	S-7595	Polyimide is the generic name for Kapton Tape which can be purchased form multiple vendors (Amazon, Kaptontape.com)
HBSS- Hank's Balanced Salt Solution	Gibco	14025-092	
1x PBS	Gibco	10010-023	
Falcon Petri dishes 35 x 10 mm	VWR	25373-041	
Microfilter Cassette	Circulogix Inc.	FC-01	Custom catridges are avilable based on filtration for CTC from blood or urine
Syringe 20 ml	BD Scientific	302830	
Syringe Pump	KD scientific	78-0100V	Any syringe pump capable of holding a 25 ml syringe may be used
Cellstar 50 ml Centrifuge tube	VWR	82050-322	
Greiner Bio One 6 well plate	VWR	89131-688	Any brand can be used, as long as the surface is compatible for cell adesion and not repellant
SKBR3 Cells	ATCC	HTB-30	
Live Dead Assay	Life Technologies	L3224	Any assay that can provide a reasonable analysis to evaluate live cells will work
Cell Culture Incubator	VWR	98000-368	Any incubator that can be used for cell culture will suffice