

Materials List for:

# Nanoscopic Imaging of Human Tissue Sections via Physical and Isotropic Expansion

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URL: <https://www.jove.com/video/60195>

DOI: [doi:10.3791/60195](https://doi.org/10.3791/60195)

## Materials

Name	Company	Catalog Number	Comments
4-hydroxy-TEMPO (4HT)	Sigma Aldrich	176141	Inhibitor
6-well glass-bottom plate (#1.5 coverglass)	Cellvis	P06-1.5H-N	
Acetone	Fischer Scientific	A18-500	
Acrylamide	Sigma Aldrich	A8887	
Acryloyl-X, SE (AcX)	Invitrogen	A20770	
Agarose	Fischer Scientific	BP160-100	
Ammonium persulfate (APS)	Sigma Aldrich	A3678	Initiator
Anti-ACTN4 antibody produced in rabbit	Sigma Aldrich	HPA001873	
Anti-Collagen IV antibody produced in mouse	Santa Cruz Biotech	sc-59814	
Anti-Vimentin antibody produced in chicken	Abcam	ab24525	
Aqua Hold II hydrophobic pen	Scientific Device	980402	
Breast Common Disease Tissue Array	Abcam	ab178113	
DAPI (1 mg/mL)	Thermo Scientific	62248	Nuclear stain
Diamond knife No. 88 CM	General Tools	31116	
Ethanol	Pharmco	111000200	
Ethylenediaminetetraacetic acid (EDTA) 0.5 M	VWR	BDH7830-1	
FFPE Kidney Sample	USBiomax	HuFPT072	
Forceps			
Goat Anti-Chicken IgY (H+L), Highly Cross-Adsorbed CF488A	Biotium	20020	
Goat Anti-Chicken IgY (H+L), Highly Cross-Adsorbed CF633	Biotium	20121	
Goat anti-Rabbit IgG (H+L) Highly Cross-Adsorbed Alexa Fluor 546	Invitrogen	A11010	
MAXbind Staining Medium	Active Motif	15253	Can be substituted with non-commercial staining buffer of choice.
MAXblock Blocking Medium	Active Motif	15252	Can be substituted with non-commercial blocking buffer of choice.

MAXwash Washing Medium	Active Motif	15254	Can be substituted with non-commercial washing buffer of choice.
Micro cover Glass #1 (24 mm x 60 mm)	VWR	48393 106	
Micro cover Glass #1.5 (24 mm x 60 mm)	VWR	48393 251	
N,N,N',N'-Tetramethylethylenediamine (TEMED)	Sigma Aldrich	T9281	Accelerator
N,N'-Methylenebisacrylamide	Sigma Aldrich	M7279	
Normal goat serum	Jackson ImmunoResearch	005-000-121	For preparing blocking buffer. Dependent on animal host of secondary antibodies.
Nunclon 4-Well x 5 mL MultiDish Cell Culture Dish	Thermo Fisher	167063	Multi-well plastic culture dish
Nunclon 6-Well Cell Culture Dish	Thermo Fisher	140675	
Nunc 15 mL Conical	Thermo Fisher	339651	
Nunc 50 mL Conical	Thermo Fisher	339653	
Orbital Shaker			
Paint brush			
pH Meter			
Phosphate Buffered Saline (PBS), 10x Solution	Fischer Scientific	BP399-1	
Plastic Petri Dish (100 mm)	Fischer Scientific	FB0875713	
Proteinase K (Molecular Biology Grade)	Thermo Scientific	EO0491	
Razor blade	Fischer Scientific	12640	
Safelock Microcentrifuge Tubes 1.5 mL	Thermo Fisher	3457	
Safelock Microcentrifuge Tubes 2.0 mL	Thermo Fisher	3459	
Sodium acrylate	Sigma Aldrich	408220	
Sodium chloride	Sigma Aldrich	S6191	
Sodium citrate tribasic dihydrate	Sigma Aldrich	C8532-1KG	
Tris Base	Fischer Scientific	BP152-1	
Triton X-100	Sigma Aldrich	T8787	
Wheat germ agglutinin labeled with CF640R	Biotium	29026	
Xylenes	Sigma Aldrich	214736	