

Materials List for:

Terahertz Imaging and Characterization Protocol for Freshly Excised Breast Cancer Tumors

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Materials

Name	Company	Catalog Number	Comments
70% isopropyl alcohol	VWR	89108-162	Contains 70% USP grade isopropanol and 30% USP grade deionized water
Alconox powder detergent	VWR	21835-032	Concentrated detergent to remove organic contaminants from glass, metal, stainless steel, porcelain, ceramic, plastic, rubber, and fiberglass
Bio Hazard Bags	Fisher Scientific	19-033-712	Justrite FM-Approved Biohazard Waste Container Replacement Bags
Cardboard holder	N/A	N/A	Scrap cardboard to keep tissue imaging face intact when immersed in formalin
Centrifuge Tubes	VWR	10026-078	Centrifuge Tubes with Flat Caps, Conical-Bottom, Polypropylene, Sterile, Standard Line
Cotton Swabs	Walmart	551398298	Q-tips Original Cotton Swabs used to dye the tissue
Ethyl Alcohol	VWR	71002-426	KOPTECH Pure (undenatured) anhydrous (200 proof/100%) ethyl alcohol
Eye protection goggles	VWR	89130-918	Kimberly-clark professional safety glasses
Face Mask	VWR	95041-774	DUKAL Corporation surgical masks
Filter paper	Sigma Aldrich	Z240087	Whatman grade 1 cellulose filters
Formalin solution	Sigma Aldrich	HT501128-4L	10% neutral buffered formalin
Human freshly excised tumors (Infiltrating Ductal Carcinoma (IDC))	National Disease Research Interchange (NDRI biobank)	N/A	A protocol is signed with the NDRI for the type of tumors required
IRADECON Bleach solution	VWR	89234-816	Pre-diluted Sodium Hypochlorite Bleach solution
KIMTECH SCIENCE wipes	VWR	21905-026	Kimberly-clark professional Kim wipes
Laboratory Coat	VWR	10141-342	This catalog number is for medium size coat
Laboratory tweezers/Forceps	VWR	82027-388	Any laboratory tweezers can be used as long as it does not damage the tissue

Liquid sample holder (two quartz windows with a 0.1 mm teflon spacer)	TeraView, Ltd	N/A	1" diameter, and 0.1452" thick quartz windows
Nitrile hand gloves	VWR	82026-426	This catalog number is for medium size gloves
Nitrogen cylinder	Airgas	NI UHP300	NITROGEN UHP GR 5.0 SIZE 300
Paper towel	VWR	14222-321	11" x 8.78" Sheets, 1 Ply
Parafilm	VWR	52858-076	Flexible thermoplastic. Rolled, waterproof sheet interwound with paper to prevent self-adhesion.
Petri Dish	VWR	470210-568	VWR Petri Dish, Slippable, Mono Plate (undivided bottom)
Polystyrene Plate	Home Depot	1S11143A	~ 10 cm x 10 cm square piece cut from a 11" x 14" x 0.05" Non-glare styrene sheet
ScanAcquire Software	TeraView, Ltd	N/A	System Software for THz reflection imaging measurements
Stainless steel low-profile blade (#4689)	VWR	25608-964	Tissue-Tek Accu-Edge Disposable Microtome Blades
Stainless steel metal tray	Quick Medical	10F	Polar Ware Stainless Steel Medical Instrument Trays
Tissue Marking Dyes	Ted Pella, Inc	Yellow Dye #27213-1 Red Dye #27213-2 Blue Dye #27213-4	Used to orient excised tissue samples sent to the histopathology laboratory
TPS Spectra 3000	TeraView, Ltd	N/A	THz imaging and spectroscopy system
TPS Spectra Software	TeraView, Ltd	N/A	System Software for THz transmission spectroscopy measurements