

Materials List for

Patient-Derived Tumor Explants As a "Live" Preclinical Platform for Predicting Drug Resistance in Patients

Giuditta Viticchié¹, Ian Powley¹, Constantinos Demetriou¹, James Cooper¹, Michael Butterworth¹, Meeta Patel¹, Naila Abid¹, Gareth Miles¹, Lynne Howells¹, Howard Pringle¹, Marion MacFarlane², Catrin Pritchard¹

¹Leicester Cancer Research Center, University of Leicester

²MRC Toxicology Unit

Correspondence to: Giuditta Viticchié at gv51@le.ac.uk

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Materials

Name	Company	Catalog Number	Comments
Acetic acid	Sigma	320099	Staining reagent
Antibody Diluent / Block, 1x	Perkin Elmer	ARD1001EA	Antibody diluent/blocking buffer
Barnstead NANOpure Diamond	Barnstead		Ultra Pure (UP) H ₂ O machine
Citric Acid Monohydrate	Sigma-Aldrich	C7129	Reagent for citrate buffer
Costar Multiple Well Cell Culture Plates	Corning Incorporated	3516	6 multiwell plate
DAPI Dilactate	Life Technologies	D3571	
100 x 17 mm Dish, Nunclon Delta	ThermoFisher Scientific	150350	100 mm diameter dish for tissue culture
DMEM (1x) Dubelcco's Modified Eagle Medium + 4.5 g/L D-Glucose + 110 mg/mL Sodium Pyruvate	Gibco (Life Technologies)	10569-010	Tissue culture medium (500 mL)
DPX mountant	VWR	360294H	Mounting medium
DPX mountant	Merck	6522	Mounting medium
Ethylenediaminetetraacetic acid (EDTA)	Sigma-Aldrich	3609	Reagent for TE buffer
Eosin	CellPath	RBC-0100-00A	Staining reagent
Foetal Bovine Serum	Gibco	10500-064	For use in tissue culture medium
37% Formaldehyde	Fisher (Acros)	119690010	10% Formalin
iGenix, microwave oven IG2095	iGenix	IG2095	Microwave used for antigen retrieval
Industrial methylated spirit (IMS)	Genta Medical	199050	99% Industrial Denatured Alcohol (IDA)
InForm Advanced Image Analysis Software	Akoya Biosciences	InForm	
Leica ASP3000 Tissue Processor	Leica Biosystems		Automated Vacuum Tissue Processor
Leica Arcadia H and C	Leica Biosystems		Embedding wax bath
Leica RM2125RT	Leica Biosystems		Rotary microtome
Leica ST4040 Linear Stainer	Leica Biosystems		H&E stainer
Mayer's Haematoxylin	Sigma	GHS132-1L	Staining reagent
Millicell Cell Culture Inserts, 30 mm, hydrophilic PTFE, 0.4 µm	Merck Milipore	PICMORG50	Organotypic culture insert disc
Novolink Polymer Detection System	Leica Biosystems	RE7150-K	DAB staining kit

OPAL 480	Akoya Biosciences	FP1500001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent
OPAL 520	Akoya Biosciences	FP1487001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent
OPAL 570	Akoya Biosciences	FP1488001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent
OPAL 620	Akoya Biosciences	FP1495001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent
OPAL 650	Akoya Biosciences	FP1496001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent
OPAL 690	Akoya Biosciences	FP1497001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent
OPAL 780 / OPAL TSA-DIG Reagent	Akoya Biosciences	FP1501001KT	Fluorophore with Dimethyl Sulfoxide (DMSO) diluent and TSA-DIG reagent
Opal Polymer HRP Ms Plus Rb, 1x	Perkin Elmer	ARH1001EA	HRP polymer
Penicillin/streptomycin solution	Fisher Scientific	11548876	For use in tissue culture medium
PhenoChart Whole Slide Contextual Viewer	Akoya Biosciences	PhenoChart	Viewer software for scanned images
Phosphate Buffered Saline Tablets	Thermo Scientific Oxoid	BR0014G	PBS
1x Plus Amplification Diluent	Perkin Elmer	FP1498	Fluorophore diluent
Prolong Diamond Antifade Mountant	Invitrogen	P36961	Mounting medium
Slide Carrier	Perkin Elmer		To load slides into Slide Carrier Hotel for scanning with Vectra Polaris
Sodium Chloride	Fisher Scientific	S/3160/63	10% Formalin
Sodium Hydroxide pellets	Fisher Scientific	S/4920/53	Reagent for citrate buffer
Tenatex Toughened Wax - Pink (500 g)	KEMDENT	1-601	Dental wax surface
Thermo Scientific Shandon Sequenza Slide Rack for Immunostaining Center	Fisher Scientific	10098889	Holder for slides and slide clips
Thermo Scientific Shandon Plastic Coverplates	Fisher Scientific	11927774	Slide clips
Tris(hydroxymethyl)aminomethane (Tris)	Sigma-Aldrich	252859	Reagent for TE buffer
VectaShield	Vecta Laboratories	H-1000-10	Mounting medium
Vectra Polaris Slide Scanner	Perkin Elmer	Vectra Polaris	Slide scanner
Xylene	Genta Medical	XYL050	De-waxing agent