

Materials List for:

Target Cell Pre-enrichment and Whole Genome Amplification for Single Cell Downstream Characterization

Shukun Chen^{*1}, Amin El-Heliebi^{*1}, Julia Schmid¹, Karl Kashofer², Zbigniew T. Czyz³, Bernhard Michael Polzer³, Klaus Pantel⁴, Thomas Kroneis^{1,5}, Peter Sedlmayr¹

¹Institute of Cell Biology, Histology and Embryology, Medical University of Graz

²Institute of Pathology, Medical University of Graz

³Fraunhofer Institute for Toxicology and Experimental Medicine ITEM

⁴Department of Tumor Biology, University Medical Center Hamburg-Eppendorf

⁵Sahlgrenska Cancer Center, University of Gothenburg

*These authors contributed equally

Correspondence to: Thomas Kroneis at thomas.kroneis@medunigraz.at

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Materials

Name	Company	Catalog Number	Comments
Gilupi Release Buffer	Gilupi	GIL083	Used to detach cells from the wire
McCoy's 5A Medium (1x) suppl. with L-Glutamine	Thermo Fisher Scientific	16600-082	Culture medium used for HT-29 cells, adapt culture medium to cell line used for the experiments
HEPES Buffer Solution (1 M)	PAA	S11-001	Supplement for McCoy's 5A Medium
Foetal Bovine Serum Gold	PAA	A15-151	Supplement for McCoy's 5a Modified Medium
Penicillin-Streptomycin (100x)	Biowest	L0018-100	Supplement for McCoy's 5a Modified Medium
Phosphate Buffered Saline (1x PBS)	Thermo Fisher Scientific	10010-015	
Accutase	Biowest	L0950-100	Cell detachment solution (cell culture)
Water bath	GFL	Type 1003	Used for prewarming solutions
Incubator	Thermo Fisher Scientific		Used to incubate cells (cell culture)
50 mL reaction tubes	VWR	525-0403	
Roller mixer	Stuart Scientific	SRT6D	Used to attach cells to the wire while keeping the cells from sedimenting
CellTrace CFSE Cell Proliferation Kit	Thermo Fisher Scientific	C34554	Used to label living cells (cytoplasmic label)
Hoechst 33342	H3570	Thermo Fisher Scientific	Used to stain DNA (nucleic counterstain)
Centrifuge (equipped for holding 15 mL and 50 mL reaction tubes)	Thermo Fisher Scientific	Heraeus Megafuge 40R	Used for pelleting cells
Observer Z1 (Fluorescence/laser microdissection microscope)	Carl Zeiss Microimaging		Inverted (immunofluorescence) microscope capable of laser microdissection; Fluorescence microscopes must be able to detect Hoechst 33342 (DAPI filter) and CFSE (FITC filter)
Bovine Serum Albumin (BSA)	Sigma-Aldrich	A4503-50G	Used for coating glass/plastic surfaces
MS1 Minishaker	Sigma-Aldrich	Z404039	Used for vortexing

Vacutainer EDTA (or Na-heparin) tubes	BD	366450 (or 366480)	Used as reaction tube for ex vivo capture of target cells
Detektor CANCER03 DC03	Gilupi	GIL003	Functionalized wire capable of isolating and detaching EpCAM-positive cells (also referred to as catch&release, C&R)
Syringe needles (G20)	VWR	613-0554	Used to puncture rubber caps in order to allow the non-functional part of the C&R to lead through it
Neubauer chamber	Roth	T729.1	Used to count cells
Pasteur pipettes 150 mm	Volac	D810	Used for the low-volume application of cells to the C&R
Grease pen	Dako	S2002	Used on glass slides to hold cell suspension in place
Steril syringe filter (0.2 µm)	Corning	431219	For filtering freshly prepared Gilupi Release Buffer
Delfia PlateShaker	Perkin Elmer	1296-003	Used for agitation during cell detachment
1.5 mL tubes	Eppendorf	30,125,150	
Ampli1 WGA Kit	Silicon Biosystems		To be ordered via Silicon Biosystems
Axiovert M200 equipped with Mikromanipulator MMJ and CellTram vario	Zeiss/Eppendorf		Use micromanipulation at hand
Microcapillaries (25 µm in diameter), CustomTip Type I	Eppendorf	930001201	Used for micromanipulating cells
0.2 mL PCR tubes	Biozym	710920	
Cytocentrifuge and equipment	Hettich	Universal 32	Use cytocentrifuge at hand
Thermo cycler	Bio-Rad	DNA Engine Dyad	Every thermo cycler with heated lid can be used
Microcentrifuge	Roth	CX73.1	Use desk-top centrifuge at hand
MembraneSlide 1.0 PET	Zeiss	415101-4401-050	Membrane-coated glass slides used for laser microdissection
UV Stratalinker 1800	Stratagene	400072	Use DNA cross linker at hand
Standard PCR reagents			
6x DNA Loading	Thermo Fisher Scientific	R0611	Use gel loading dye at hand
DNA ladder	BioLabs	N0551G	Use 100 bp ladder at hand
Agarose	Biozym	840004	
Gel electrophoresis station	Bio-Rad		Use electrophoresis system at hand
Gel Red Nucleic Acid Stain	Biotium	41003	Intercalating dye for DNA visualization In agarose gels