

Materials List for:

Capturing Small Molecule Communication Between Tissues and Cells Using Imaging Mass Spectrometry

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Materials

Name	Company	Catalog Number	Comments
15 mL Falcon tubes	Denville	C1017-O	To collect cells
8-well chamber (Millipore EZ-slide chamber)	Millipore	PEZGS0816	Repurposed from Millipore Millicell EZ-slide chamber slide
Acetonitrile	Sigma-Aldrich	34998-4L	Solvent for sprayed matrix
Alpha Minimum Essential Medium (αMEM)	Fisher	10-022-CV	Cell culture media
Autoflex speed MALDI-TOF LRF	Bruker		For IMS data analysis
Centrifuge	Eppendorf	5810 R	To collect cells and remove supernatant
CHCA Matrix	Bruker Daltonic	8201344	Matrix sprayed onto dried slide
DHB Matrix	Bruker Daltonic	8201346	Matrix sprayed onto dried slide
Disposable Scalpels	Fisher	22-079-707	For removal of the ovaries
Dissecting Scissors	Fisher	13-804-6	For removal of the ovaries
DMEM Media	Gibco	11995-065	Media mixed with agarose
epidermal growth factor	Peptotech Inc.	100-15	Cell culture media supplement
Eppendorf tubes	Genesee Scientific	22-282	For agarose aliquots
Estradiol-17β	Sigma-Aldrich	E2758	Cell culture media supplement
Fetal Bovine Serum	Denville	fb5001	Cell culture media supplement
FlexControl 3.4	Bruker Daltonic		IMS data acquisition software
FlexImaging 4.1	Bruker Daltonic		IMS data analysis software
Forceps (fine)	Fisher	22-327379	For removal of the ovaries
Gentamycin	Cellgro	30-005-CR	Cell culture media supplement
Insulin, Transferrin, Selenium (ITS)	Sigma-Aldrich	11074547001	Cell culture media supplement
ITO-coated slide	Bruker	8237001	Platform for co-culture incubation
Leibovitz's L-15 Medium	Gibco	11415064	Media used during tissue dissection
L-glutamine	Gibco	25030-081	Cell culture media supplement
Low-melting agarose	Sigma-Aldrich	A9414-10G	Mixed with media for plating
Media basin	Corning	4870	Used to cut plastic dividers for divided chambers
Penicillin-streptomycin	Gibco	15140-122	Cell culture media supplement
Peptide Calibration Standard	Bruker Daltonic	8206195	Calibrant for medium mass range
Phosphorus red	Sigma-Aldrich	343-242-5G	Calibrant for low mass range
SCiLS Lab 2015	Bruker Daltonic		IMS data statistical analysis
Surgical Forceps (blunt)	Fisher	08-875-8B	For removal of the ovaries

TFA	Fisher Technologies	A116-50	Added to matrix solution
TM Sprayer	HTX Technologies		For applying matrix